

| THRUST BLOCK SIZE                                                                                                                                                                                                                                                                                                                                                               |                            |                     |                                        |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------|----------------------------------------|--------|
| DIAMETER<br>OF<br>PIPE<br>INCHES                                                                                                                                                                                                                                                                                                                                                | HORIZONTAL BEND            |                     | WEIGHT<br>AT<br>VERTICAL<br>BENDS LBS. |        |
|                                                                                                                                                                                                                                                                                                                                                                                 | SURFACE<br>AREA<br>SQ. FT. | THICKNESS<br>INCHES |                                        |        |
| 22-1/2° BENDS                                                                                                                                                                                                                                                                                                                                                                   |                            |                     |                                        |        |
| 6 OR LESS                                                                                                                                                                                                                                                                                                                                                                       | 2                          | 6                   | 1,700                                  |        |
| 8                                                                                                                                                                                                                                                                                                                                                                               | 3                          | 12                  | 3,000                                  |        |
| 10                                                                                                                                                                                                                                                                                                                                                                              | 3.5                        | 12                  | 4,600                                  |        |
| 12                                                                                                                                                                                                                                                                                                                                                                              | 4                          | 14                  | 6,600                                  |        |
| 14                                                                                                                                                                                                                                                                                                                                                                              | 5                          | 18                  | 9,000                                  |        |
| 16                                                                                                                                                                                                                                                                                                                                                                              | 6                          | 18                  | 11,600                                 |        |
| 45° BENDS                                                                                                                                                                                                                                                                                                                                                                       |                            |                     |                                        |        |
| 6 OR LESS                                                                                                                                                                                                                                                                                                                                                                       | 4                          | 12                  | 3,200                                  |        |
| 8                                                                                                                                                                                                                                                                                                                                                                               | 5                          | 14                  | 5,600                                  |        |
| 10                                                                                                                                                                                                                                                                                                                                                                              | 6                          | 18                  | 9,000                                  |        |
| 12                                                                                                                                                                                                                                                                                                                                                                              | 7                          | 18                  | 13,000                                 |        |
| 14                                                                                                                                                                                                                                                                                                                                                                              | 8                          | 24                  | 17,000                                 |        |
| 16                                                                                                                                                                                                                                                                                                                                                                              | 11.5                       | 24                  | 23,200                                 |        |
| 90° BENDS AND HYDRANT BURYS                                                                                                                                                                                                                                                                                                                                                     |                            |                     |                                        |        |
| 6 OR LESS                                                                                                                                                                                                                                                                                                                                                                       | 6                          | 12                  | 6,000                                  |        |
| 8                                                                                                                                                                                                                                                                                                                                                                               | 8                          | 15                  | 10,700                                 |        |
| 10                                                                                                                                                                                                                                                                                                                                                                              | 10                         | 18                  | 16,700                                 |        |
| 12                                                                                                                                                                                                                                                                                                                                                                              | 12                         | 18                  | 24,000                                 |        |
| 14                                                                                                                                                                                                                                                                                                                                                                              | 18                         | 24                  | 32,600                                 |        |
| 16                                                                                                                                                                                                                                                                                                                                                                              | 21                         | 24                  | 42,700                                 |        |
| TEES & DEAD ENDS                                                                                                                                                                                                                                                                                                                                                                |                            |                     | REDUCERS                               |        |
|                                                                                                                                                                                                                                                                                                                                                                                 |                            |                     | SIZE                                   | AREA # |
| 6 OR LESS                                                                                                                                                                                                                                                                                                                                                                       | 3                          | 12                  | 6X                                     | 1      |
| 8                                                                                                                                                                                                                                                                                                                                                                               | 4                          | 15                  | 8X6                                    | 1.5    |
| 10                                                                                                                                                                                                                                                                                                                                                                              | 6                          | 18                  | 10X8                                   | 2      |
| 12                                                                                                                                                                                                                                                                                                                                                                              | 8.5                        | 18                  | 12X10                                  | 2.5    |
| 14                                                                                                                                                                                                                                                                                                                                                                              | 11.5                       | 24                  | 14X12                                  | 3      |
| 16                                                                                                                                                                                                                                                                                                                                                                              | 11.5                       | 24                  | 16X14                                  | 3.5    |
| NOTE:<br>ALL VALUES SHOWN ARE MINIMUM FOR A<br>HYDROSTATIC PRESSURE OF 150 P.S.I.<br>AND A SOIL RESISTANCE OF 2000 LBS./SQ.<br>FT. WITH PIPELINE A MINIMUM OF 2 FT.<br>OF COVER AND V OF 10 FPS.<br>THE DIR. OF PUBLIC WORKS WILL CONSIDER<br>REDUCTION OF THRUST BLOCK SURFACE AREA<br>UPON SUBMITTAL OF APPROVED SOIL RESISTANT<br>TEST RESULTS GREATER THAN 2000 LBS./SQ.FT. |                            |                     |                                        |        |

ENGINEERING DEPARTMENT

CITY OF MERCED, CALIF

## THRUST BLOCKS

DRAWN: R.D.

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DATE

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REVISED

CITY ENGINEER

W-7

SHEET

OF