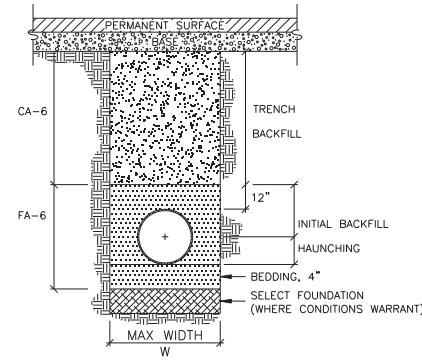
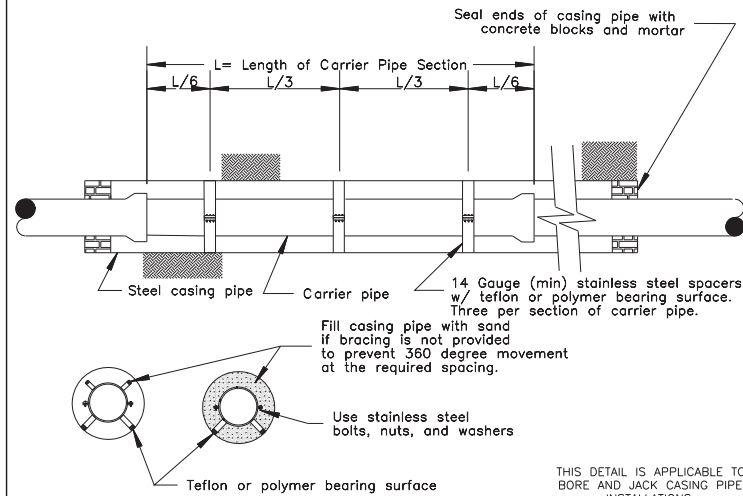


| PIPE DIA. (IN.) | MAX. PAY WIDTH (FT.) |
|-----------------|----------------------|
| <4              | 3.00                 |
| 4               | 3.33                 |
| 6               | 3.58                 |
| 8               | 3.78                 |
| 10              | 3.97                 |
| 12              | 4.17                 |
| 15              | 4.46                 |
| 16              | 4.56                 |
| 18              | 4.75                 |
| 24              | 5.33                 |



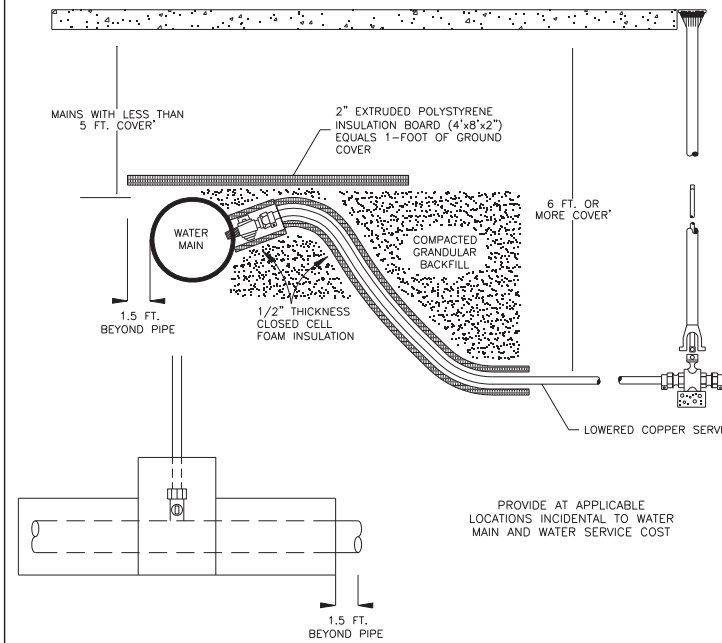
NOTE:  
THESE ITEMS WILL BE INCIDENTAL ON WATER SERVICES.  
TRENCH BACKFILL SHALL BE MECHANICALLY COMPACTED TO 95% STANDARD PROCTOR OPTIMUM DENSITY.

TRENCH BACKFILL AND SELECT FOUNDATION  
MATERIAL PAY LIMIT SCHEDULE  
N.T.S.

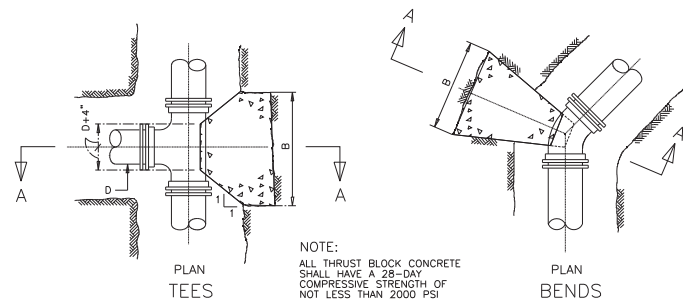


THIS DETAIL IS APPLICABLE TO BORE AND JACK CASING PIPE INSTALLATIONS.

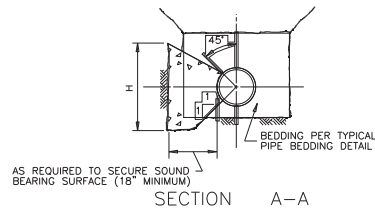
WATER MAIN CASING DETAIL  
N.T.S.



FREEZE PROTECTION  
N.T.S.



NOTE:  
ALL THRUST BLOCK CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF NOT LESS THAN 2000 PSI

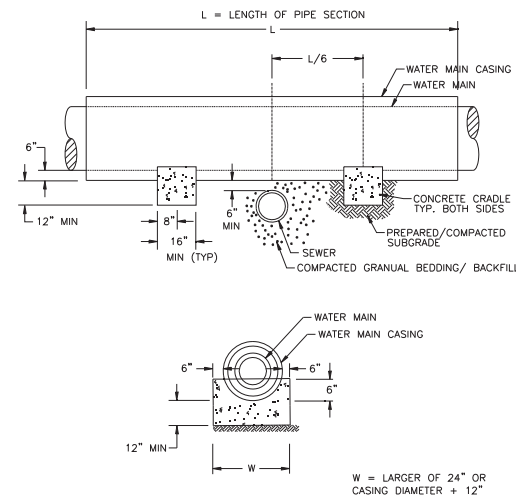


BENDS AND TEES

| PIPE SIZE | 90° BENDS |    | 45° BENDS |    | 22 1/2° ELLS |    | 11 1/4° ELLS |    | TEES |    |
|-----------|-----------|----|-----------|----|--------------|----|--------------|----|------|----|
|           | D         | H  | B         | H  | B            | H  | B            | H  | B    |    |
| 6"        | 12        | 24 | 9         | 18 | 7            | 14 | 11           | 22 | 11   | 22 |
| 8"        | 16        | 32 | 12        | 24 | 9            | 18 | 14           | 28 | 14   | 28 |
| 10"       | 20        | 40 | 15        | 30 | 11           | 22 | 17           | 34 | 17   | 34 |
| 12"       | 24        | 48 | 18        | 36 | 13           | 26 | 21           | 42 | 21   | 42 |
| 16"       | 32        | 64 | 24        | 48 | 17           | 34 | 28           | 56 | 28   | 56 |

\* DIMENSIONS SHOWN ARE MINIMUM \* DIMENSIONS SHOWN ARE INCHES

THRUST BLOCK DETAILS  
N.T.S.



- NOTE:
- CONCRETE CRADLES ARE REQUIRED WHEN WATER MAIN CROSSES OVER SEWER PIPES WITH A VERTICAL CLEARANCE OF LESS THAN 18".
  - CRADLES TO BE BUILT ON UNDISTURBED EARTH PREPARED/COMPACTED TO THE SATISFACTION OF THE ENGINEER.
  - CONCRETE TO BE CLASS SI PER 1001 SECTION 1020.04.
  - CONCRETE CRADLES TO BE MEASURED AND PAID FOR AS CLASS SI CONCRETE (MISCELLANEOUS).

CONCRETE CRADLES  
N.T.S.



USER NAME = ROBERT FREY  
PLOT SCALE = N/A  
PLOT DATE = 07/16/2012

DESIGNED BDA  
DRAWN BPF  
CHECKED MLP  
DATE 02/17/12

REVISED 07/16/2012 BPF  
REVISED 10/30/2012 MJS  
REVISED 11/27/2012 BPF  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED WATER MAIN DETAILS  
IL RTE 2

SCALE: N/A SHEET NO. 373 OF 705 SHEETS

| F.A.P. RTE.               | SECTION      | COUNTY    | TOTAL SHEETS | SHEET NO.          |
|---------------------------|--------------|-----------|--------------|--------------------|
| 742                       | (32, 33) R-1 | WINNEBAGO | 705          | 373                |
|                           |              |           |              | CONTRACT NO. 64821 |
| ILLINOIS FED. AID PROJECT |              |           |              |                    |