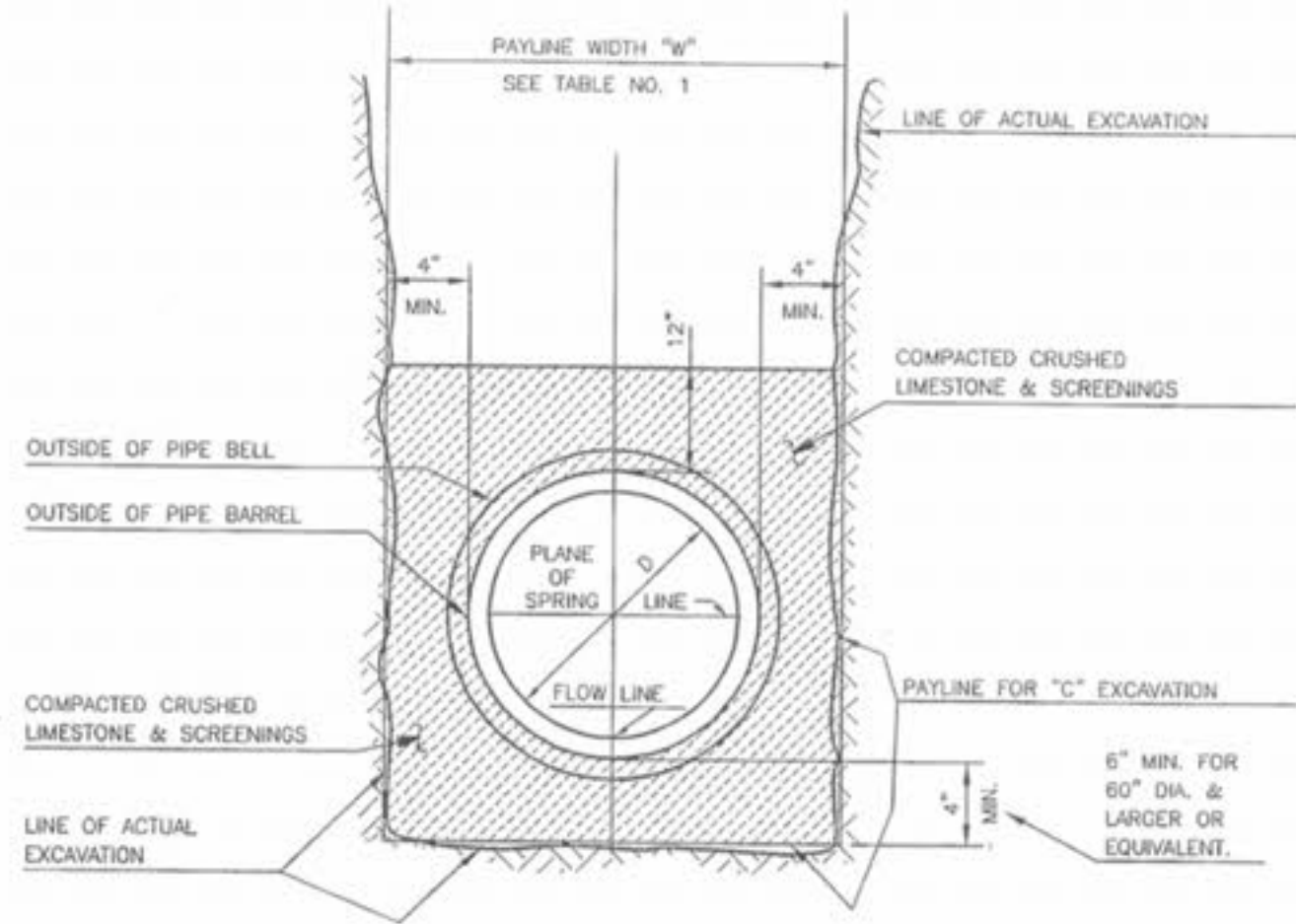
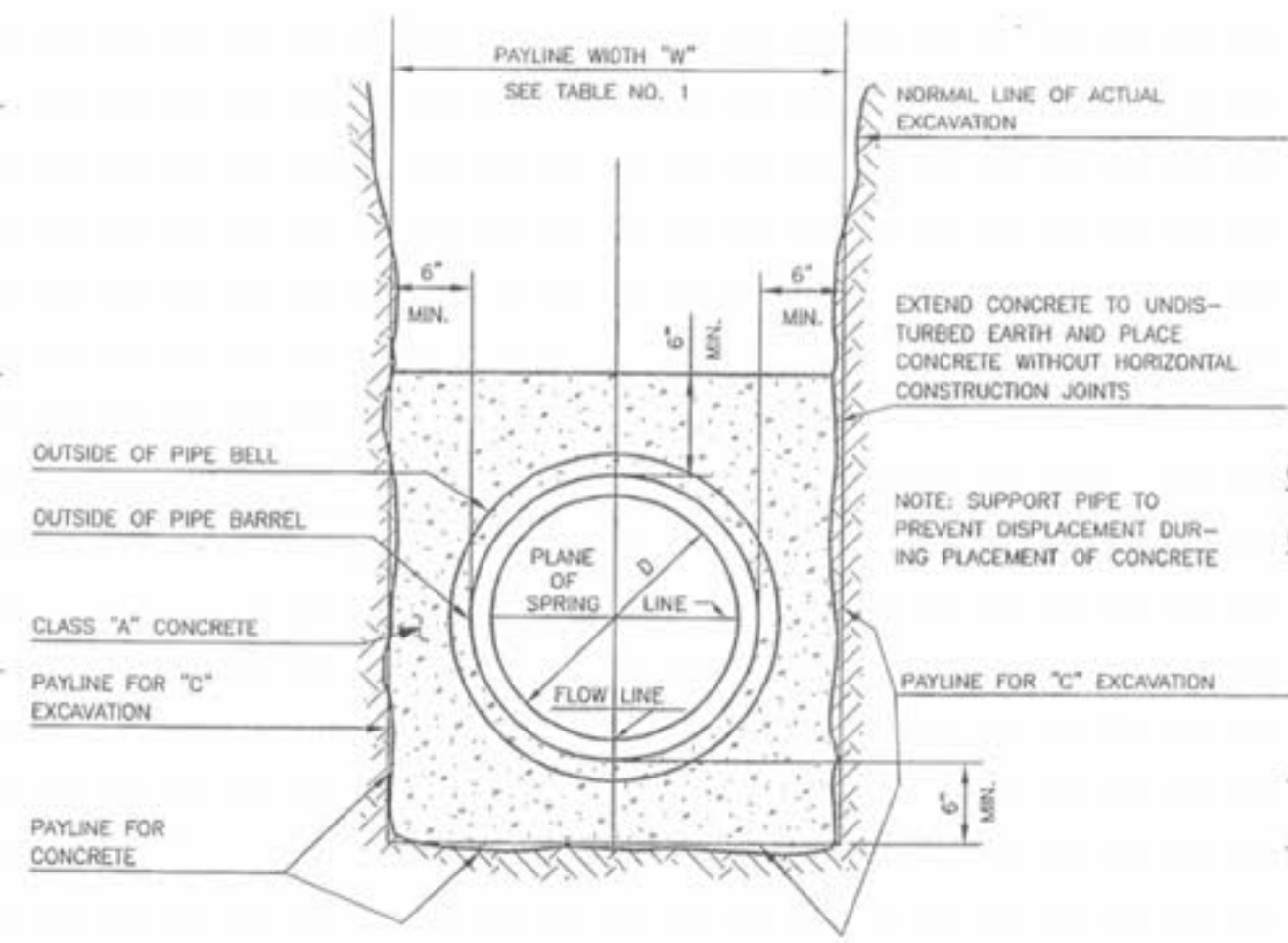


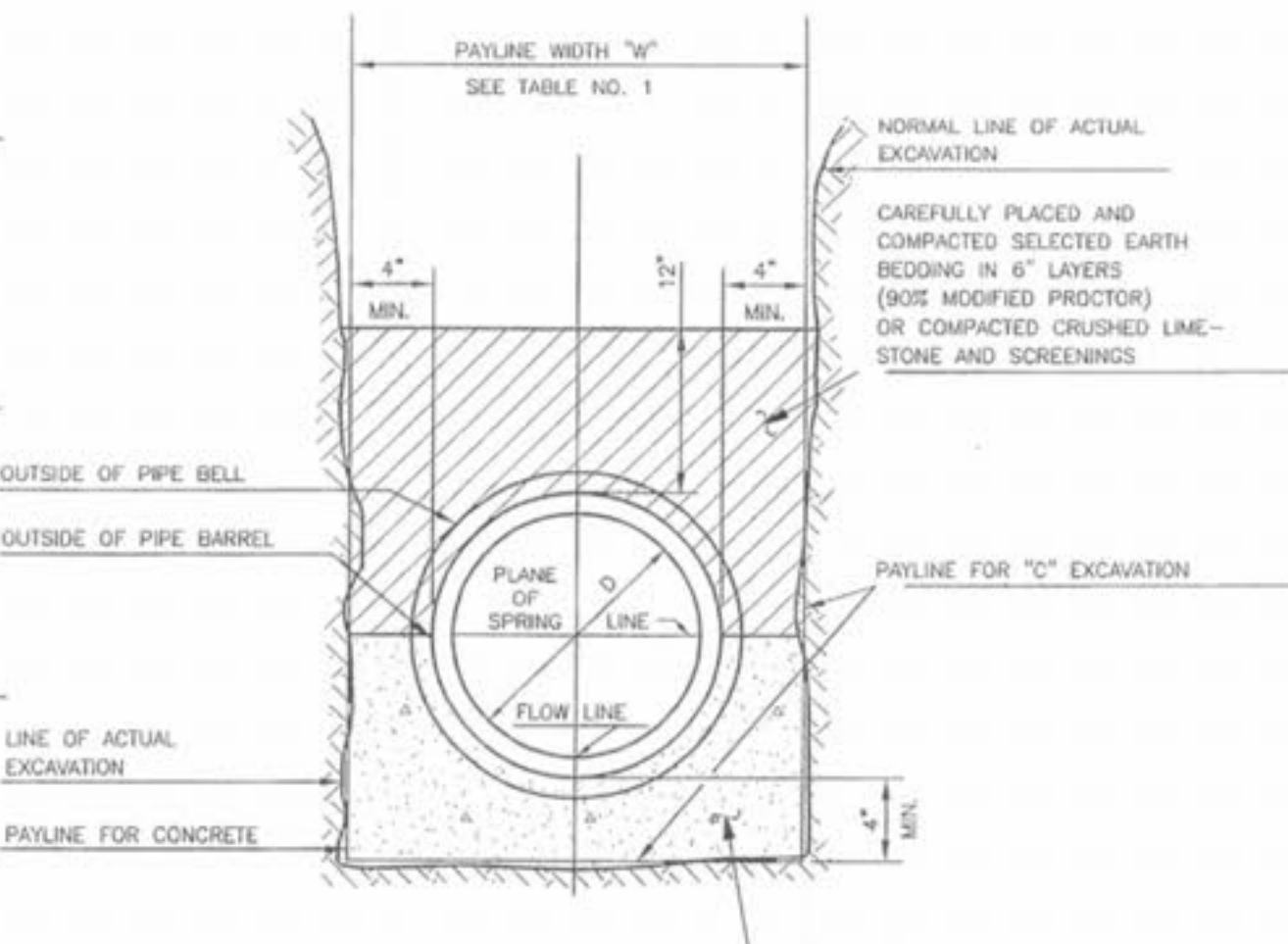
**PIPE BEDDING CLASS "C"  
(MODIFIED FOR REINFORCED  
CONCRETE PIPE)**



**PIPE BEDDING CLASS "C"  
(FOR ALL PIPE EXCEPT  
REINFORCED CONCRETE PIPE)**



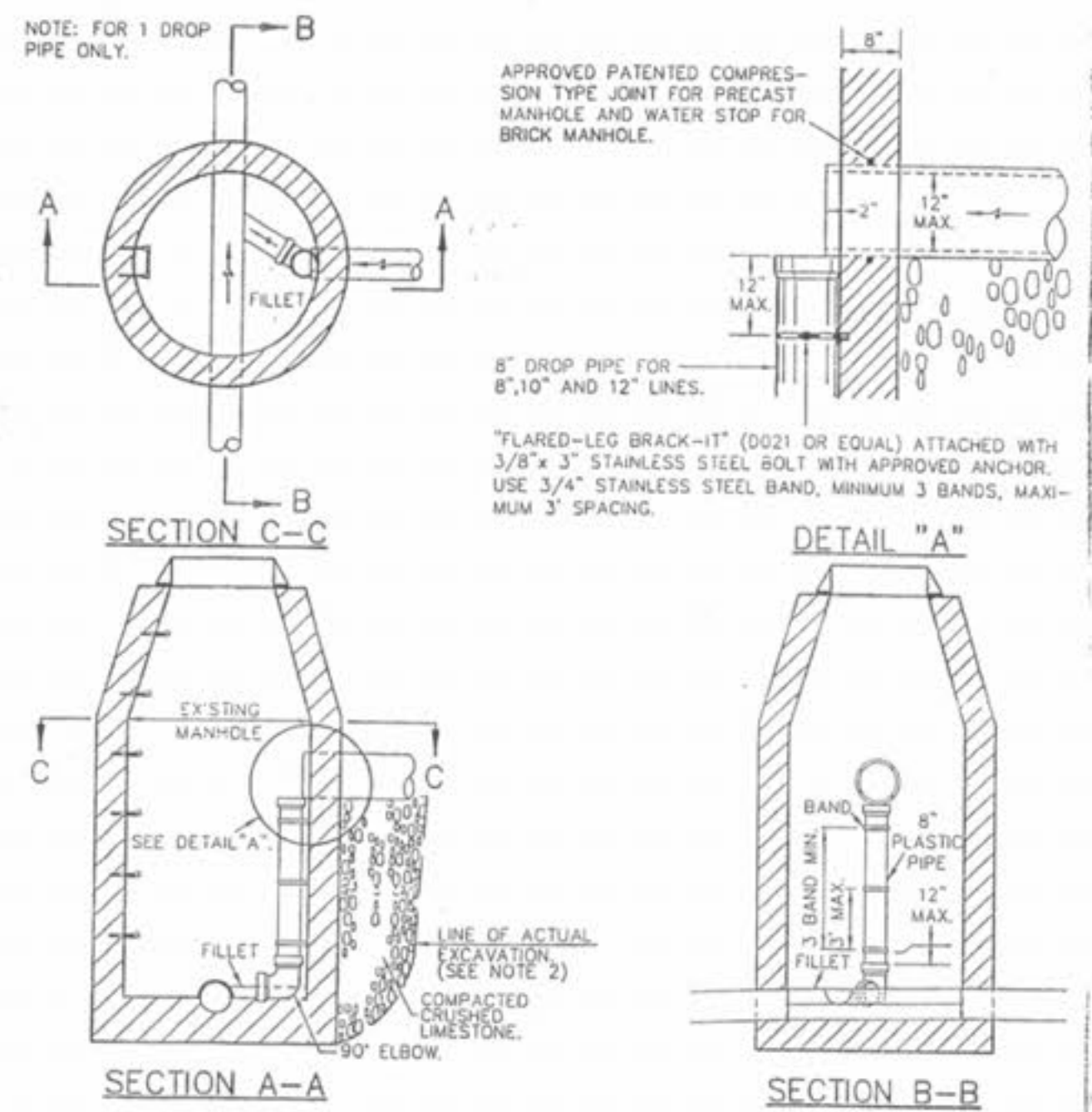
**CONCRETE ENCASEMENT**



**( CLASS "A" BEDDING )  
CONCRETE CRADLE**

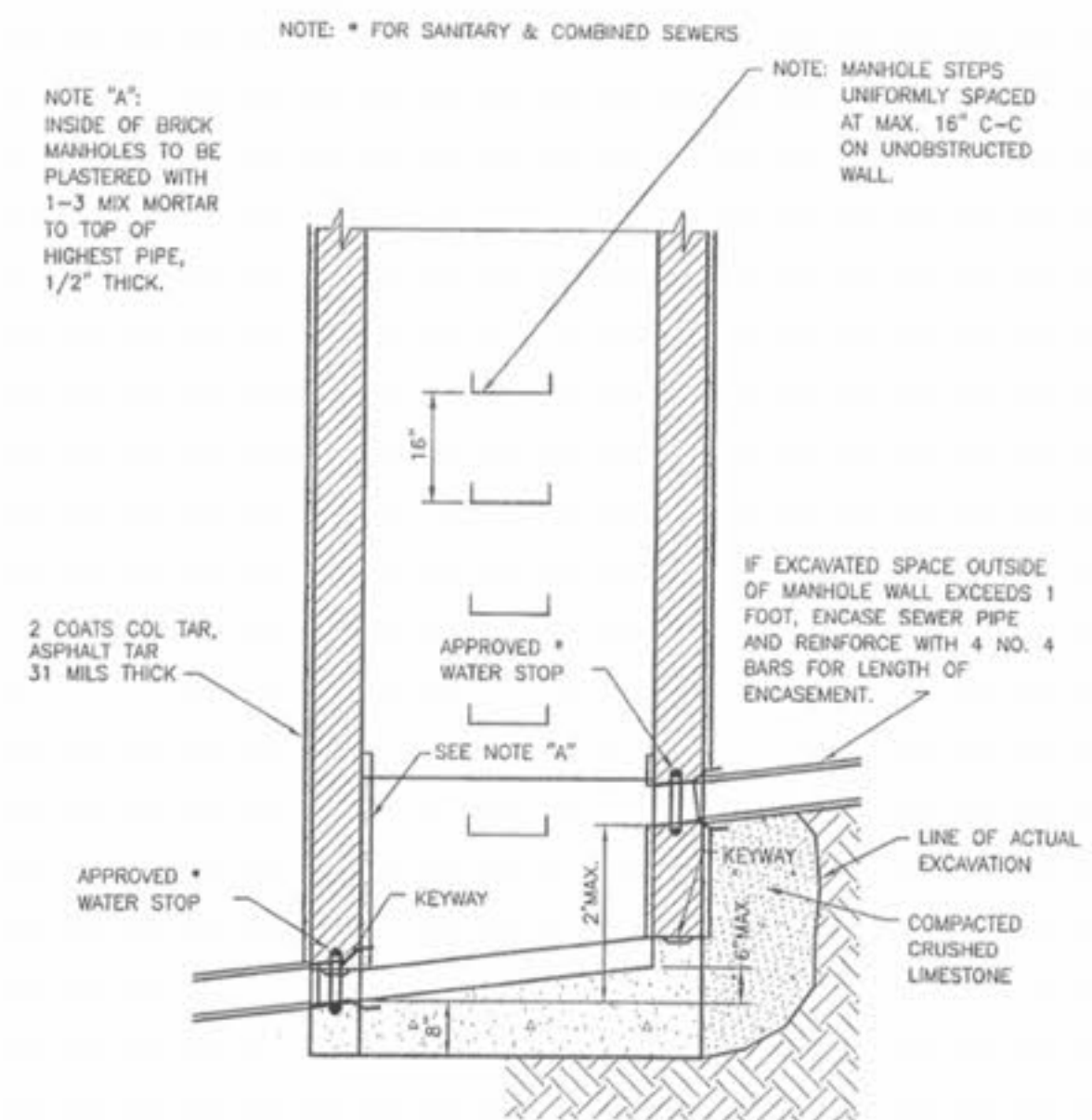
ALSO FOR PIPE SEWERS ON GRADES 25% TO 50% INCLUSIVE.  
FOR GRADES EXCEEDING 50% SEE PROJECT SPECIFICATIONS.

CLASS "A" CONCRETE FOR PLASTIC PIPE USE CONCRETE COLLARS TWO FEET LONG AND SIX INCHES THICK EVERY TWELVE FEET ADJACENT TO AND DOWN STREAM OF BELLS.  
(IN LIEU OF CONC. CRADLE)

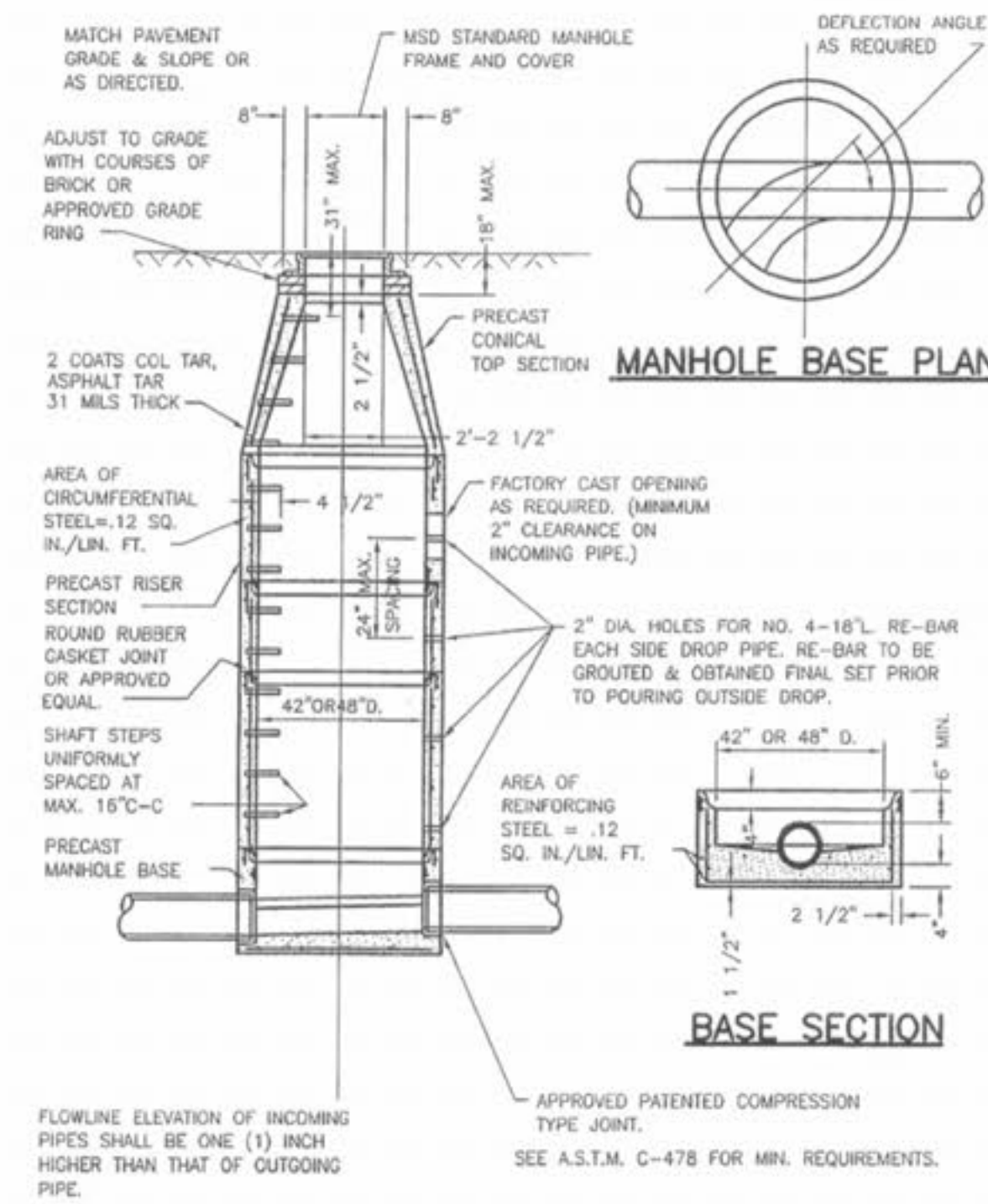


**INSIDE FOULWATER  
DROP MANHOLE**

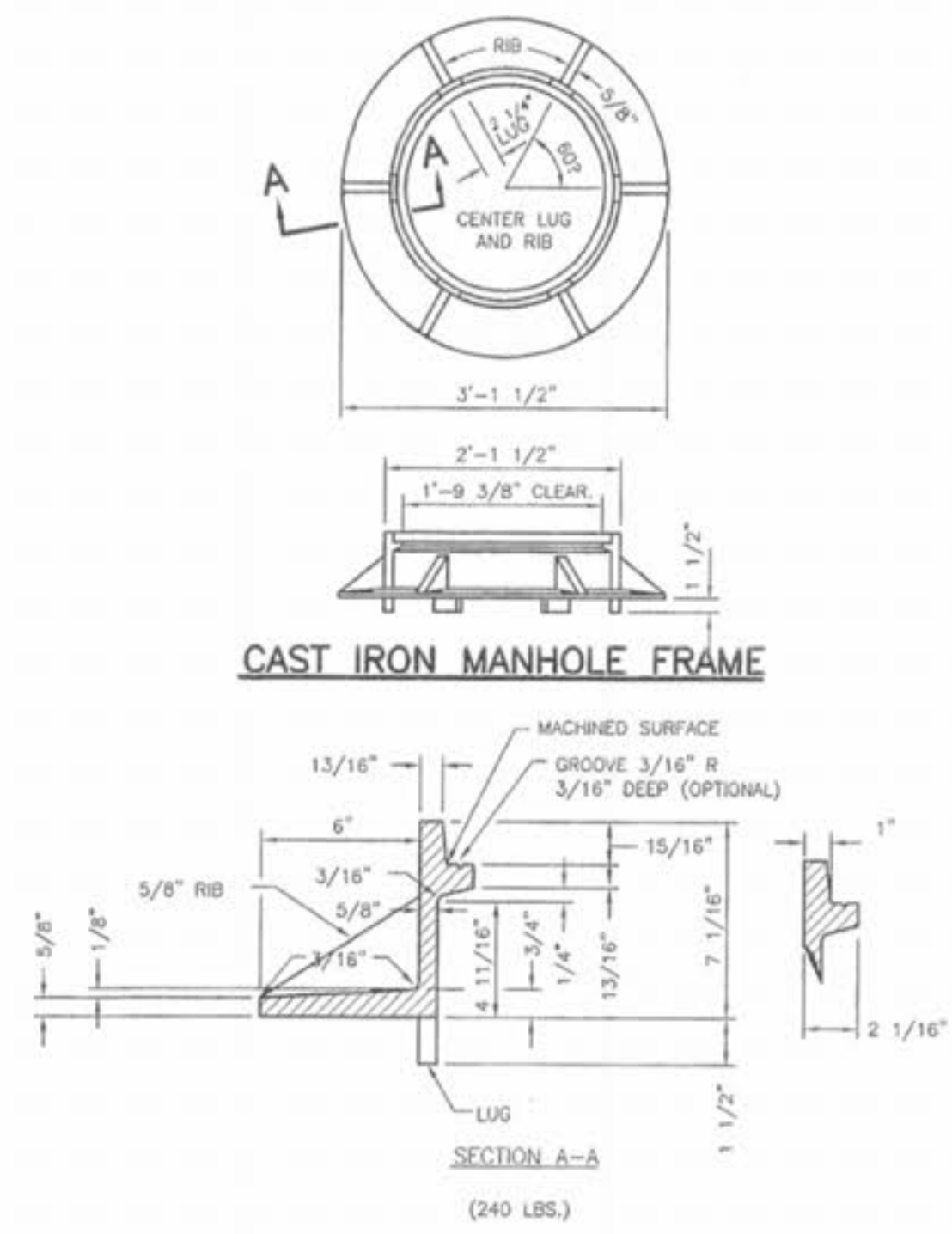
NOTES:  
1) NEW INSIDE DROP ON EXISTING MANHOLE REQUIRES THAT THE FLOWLINE OF THE NEW DROP PIPE ELBOW BE CONSTRUCTED AT THE SAME ELEVATION AS THE SPRINGLINE OF THE EXISTING SEWER MAIN AT THE CENTER OF THE EXISTING MANHOLE. A CLASS "A" CONCRETE FILLET AND INVERT SHALL BE CONSTRUCTED FOR DROP PIPE.  
2) IF EXCAVATED SPACE OUTSIDE OF MANHOLE WALL EXCEEDS 1 FOOT, PROVIDE 6 INCHES OF CLASS "A" CONCRETE ENCASEMENT ON INCOMING LINE FROM WALL OF MANHOLE TO A MINIMUM OF 2 FEET INTO UNDISTURBED EARTH WITH A MINIMUM OF 4-#4 REBARS FOR LENGTH OF ENCASEMENT OR INSTALL ONE LENGTH OF D.I.P. FROM MANHOLE INTO UNDISTURBED EARTH.



**INSIDE DROP  
(8" THRU 24" DIA. PIPE)**



**PRE-CAST CONCRETE MANHOLE  
FOR SEWERS  
8" THROUGH 12"**



**CAST IRON  
MANHOLE FRAME**



DISCLAIMER OF RESPONSIBILITY  
I HEREBY CERTIFY THAT THE DRAWINGS HEREON TO BE APPROVED BY ME OR ANY OTHER AUTHORITY ARE THE PROPERTY OF THE ENGINEER OR ARCHITECT AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER OR ARCHITECT.

DESIGNED: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
DATE: \_\_\_\_\_  
PROJECT NO.: \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_

**CITY OF FALLON  
DEPARTMENT OF PUBLIC  
WORKS DESIGN GROUP  
O'FALLON, MISSOURI**

**ST. CHARLES ENGINEERING & SURVEYING, INC.**  
801 S. FIFTH STREET, SUITE 202  
ST. CHARLES, MO 63301  
TEL: (636) 947-0607 FAX: (636) 947-2448



ORDER NO. 03-0498  
DATE 12/1/03  
D6

**MAGNOLIA  
SANITARY DETAILS 1**