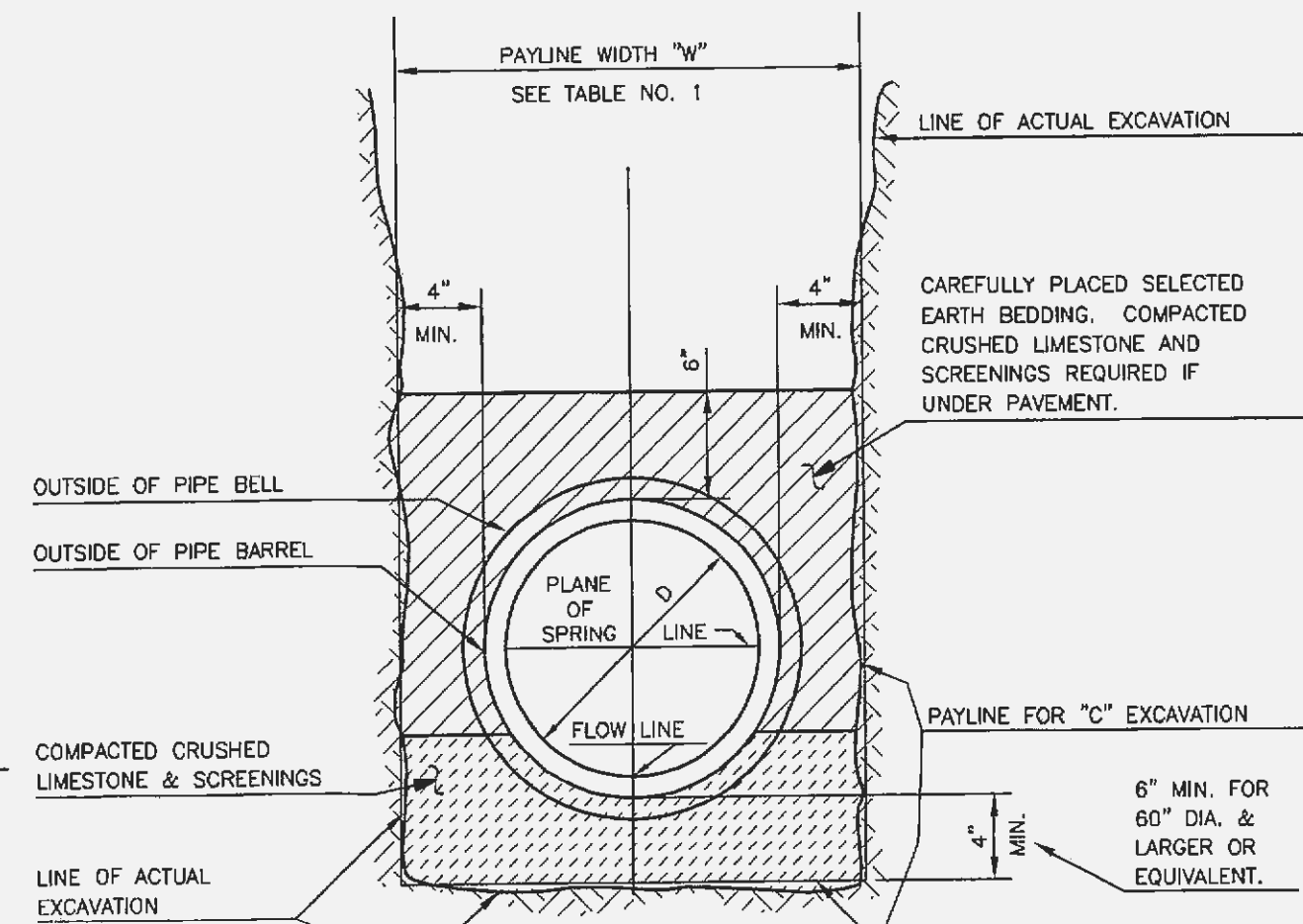
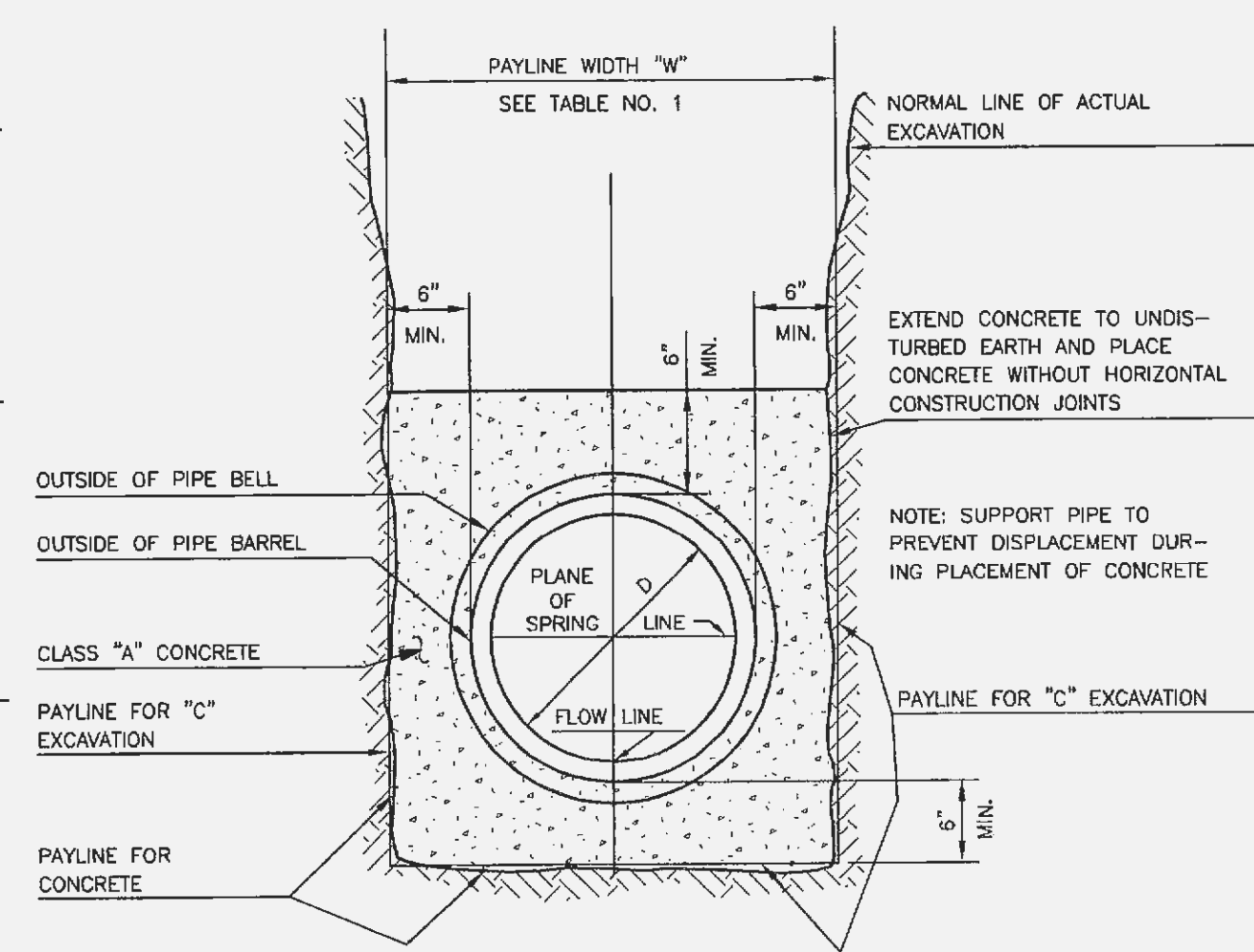


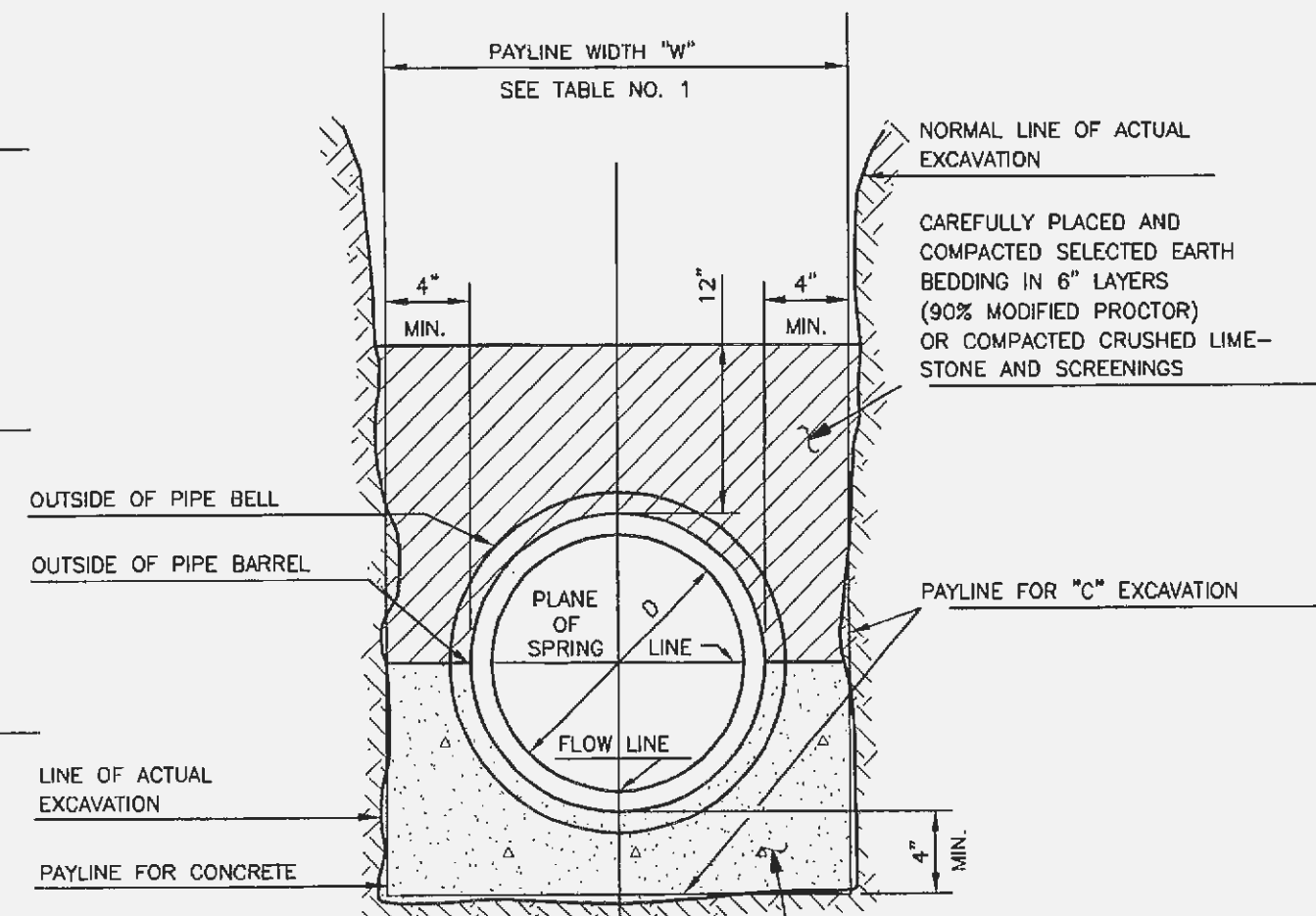
**PIPE BEDDING CLASS "C"
(FOR ALL PIPE EXCEPT
REINFORCED CONCRETE PIPE)**



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



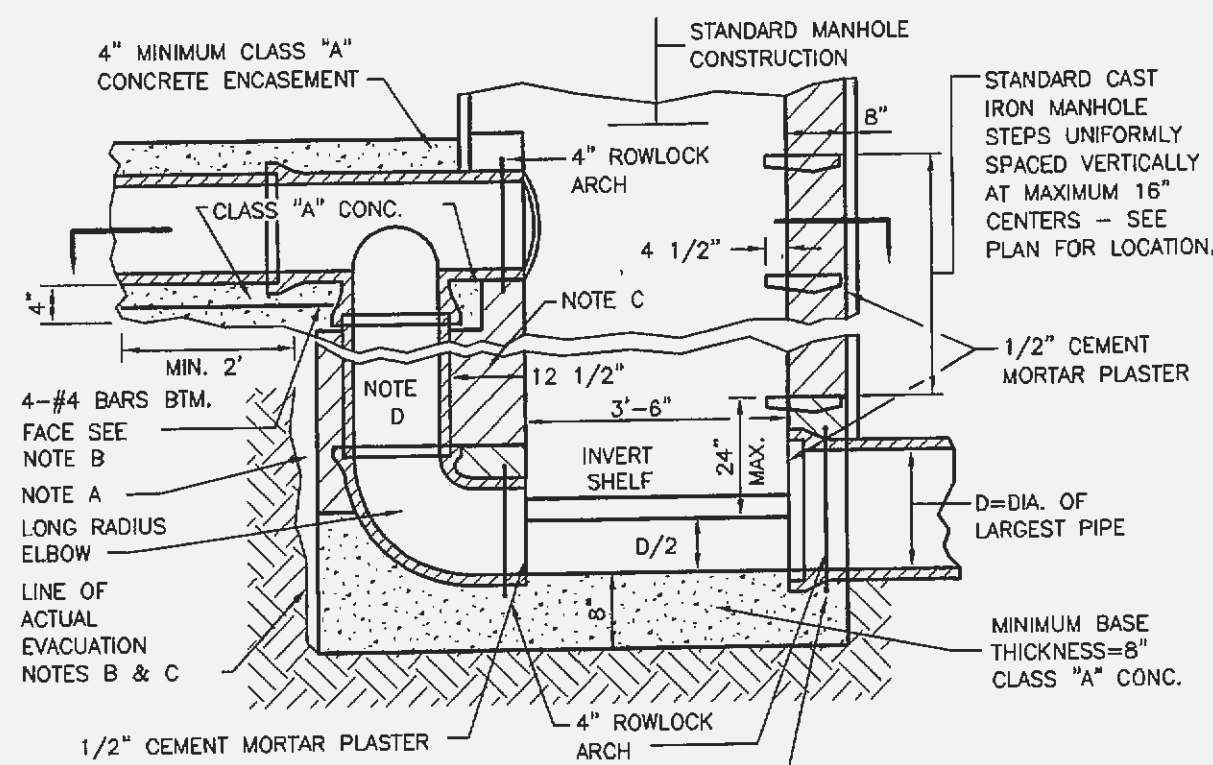
CONCRETE ENCASEMENT



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

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

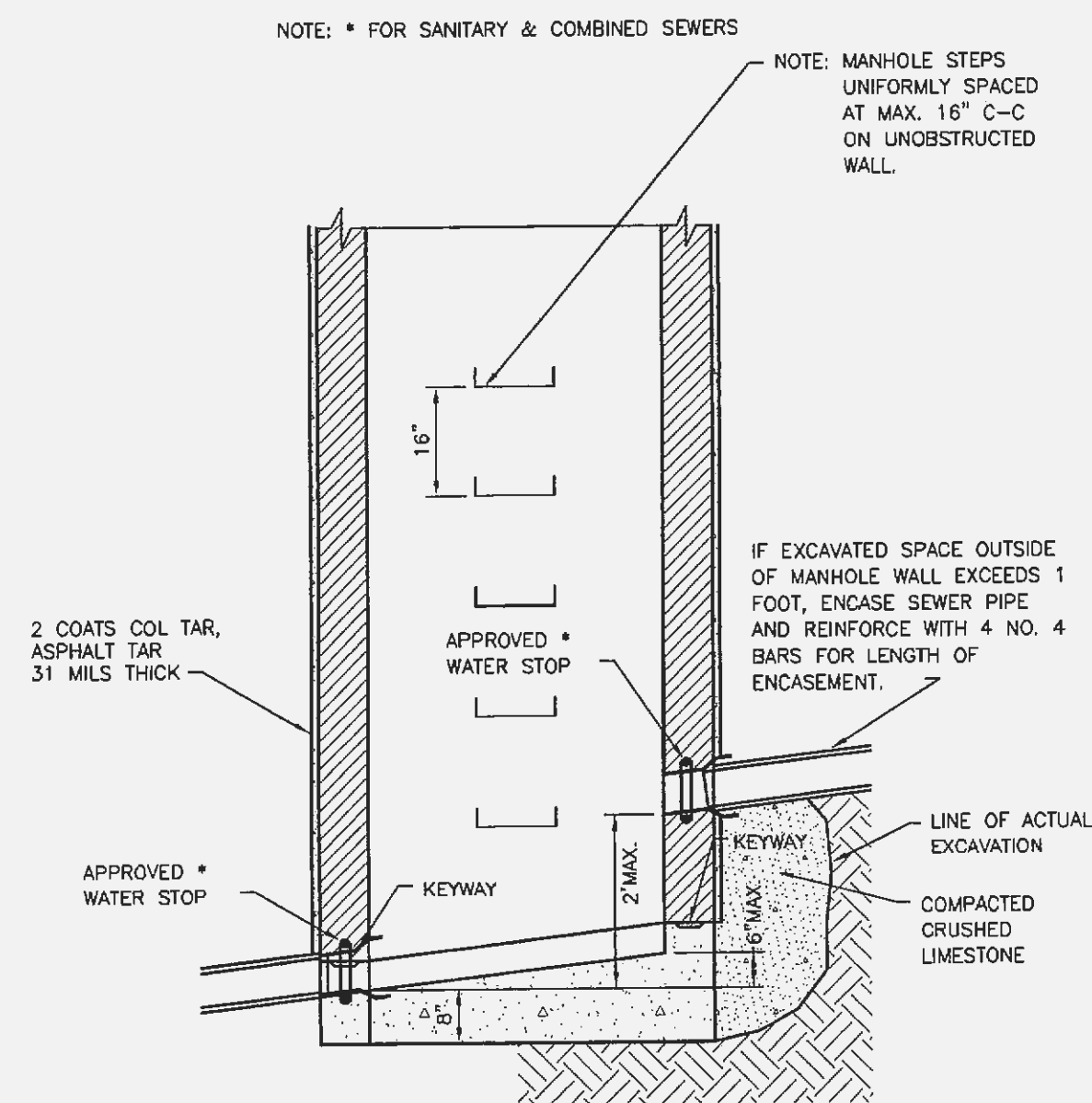
CLASS "A" CONCRETE, FOR
PLASTIC PIPE USE CONCRETE
COLLARS TWO FEET LONG AND
SIX INCHES THICK EVERY
TWELVE FEET ADJACENT TO
AND DOWN STREAM OF BELLS.
(IN LIEU OF CONC. CRADLE)



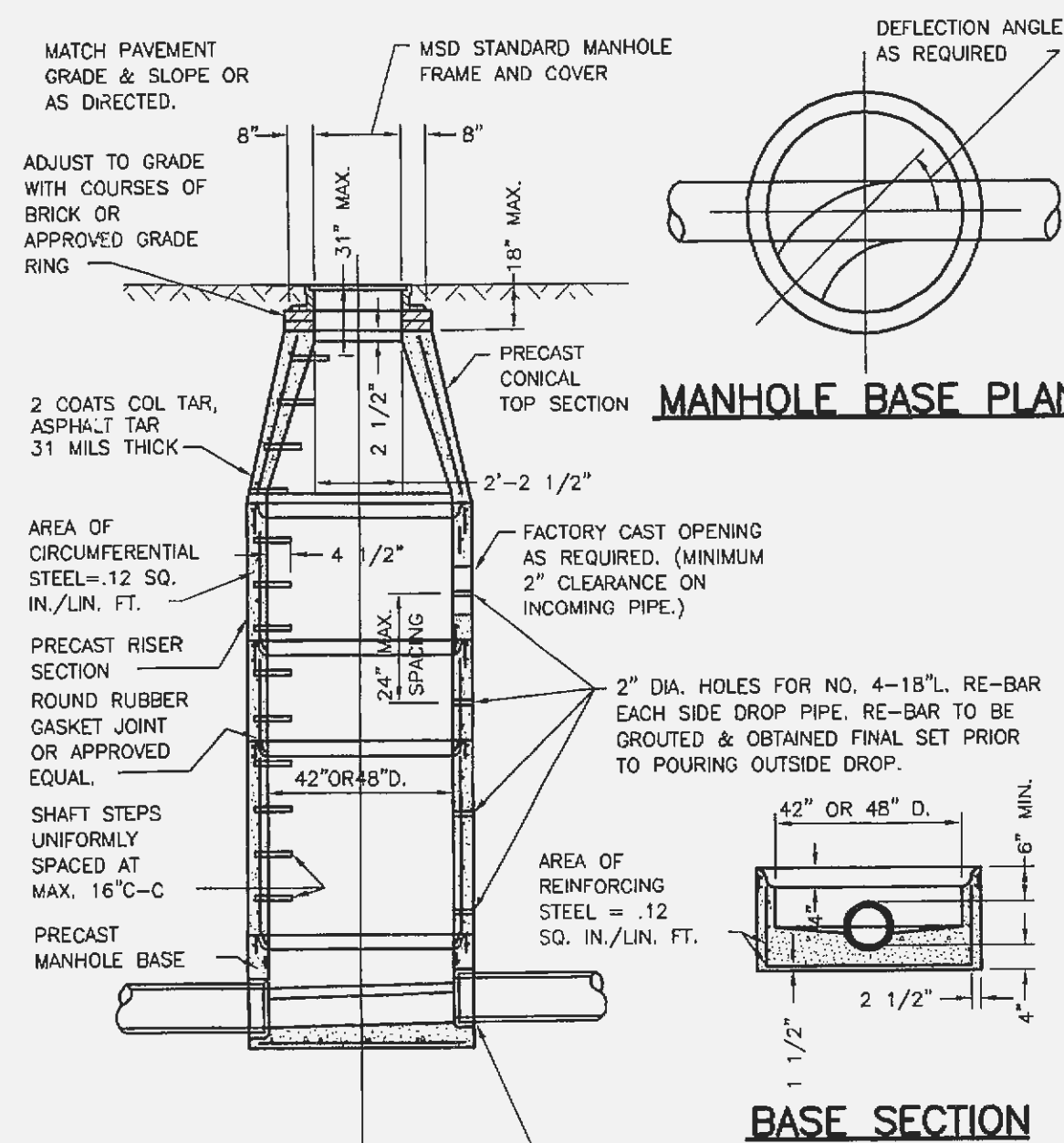
PLAN SECTION

**OUTSIDE FOULWATER
DROP MANHOLE**

SEE ACCOMPANYING SHEET FOR NOTES.



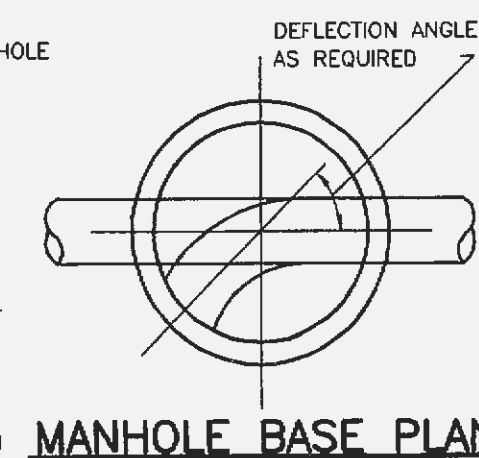
**INSIDE DROP
(8" THRU 24" DIA. PIPE)**
PROVIDE SWEEP INVERT
SEE DETAIL



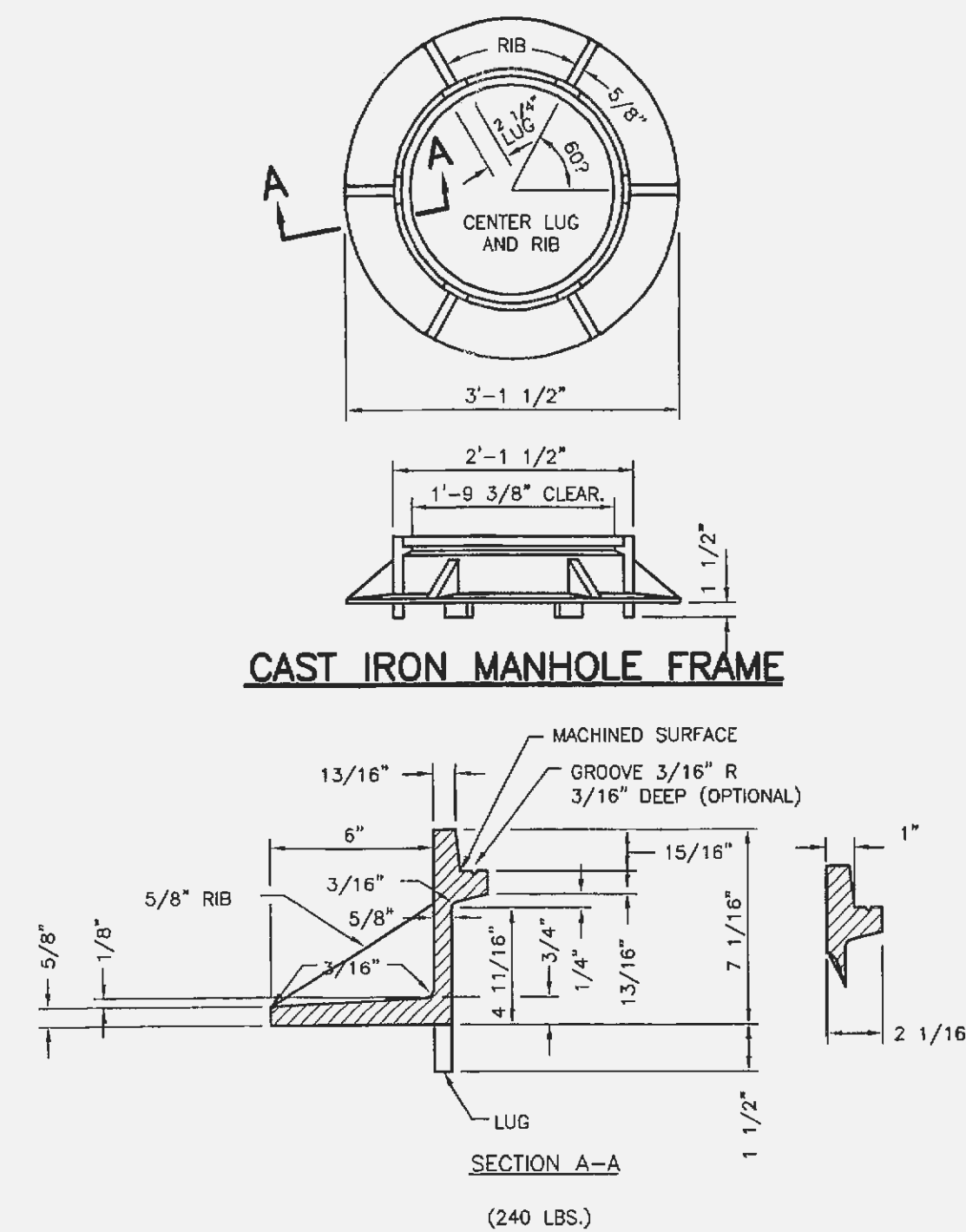
**PRE-CAST CONCRETE MANHOLE
FOR SEWERS
8" THROUGH 12"**

FLOWLINE ELEVATION OF INCOMING
PIPES SHALL BE ONE (1) INCH
HIGHER THAN THAT OF OUTGOING
PIPE.

APPROVED PATENTED COMPRESSION
TYPE JOINT.
SEE A.S.T.M. C-478 FOR MIN. REQUIREMENTS.



MANHOLE BASE PLAN



CAST IRON MANHOLE FRAME

**CAST IRON
MANHOLE FRAME**

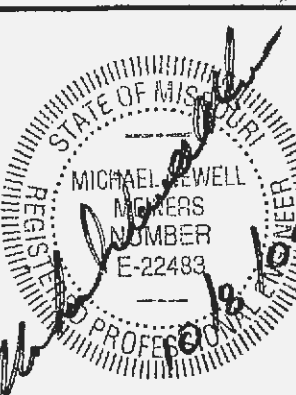
NOTE: NO BRICK MANHOLES ARE ALLOWED.

REVISED PER CITY COMMENTS
10/08/04

**LAUREL SPRINGS
SANITARY DETAILS
IMPROVEMENT PLAN**

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

S E S



ORDER NO.

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DATE

08/13/04

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