

GENERAL NOTES

1. BACKFILL WITH SUITABLE, ON SITE SOIL COMPACTED TO REQUIRED DENSITY. IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 615.03. (F&G).
2. THE COST OF MOVING, REMOVING AND REPLACING ALL FENCES, TREES, STRUCTURES OR OTHER OBSTRUCTIONS NECESSARY FOR CONSTRUCTION WILL NOT BE PAID FOR AS SUCH, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS UNLESS OTHERWISE NOTED.
3. A WATER TIGHT PLUG SHALL BE INSTALLED IN ANY NEW LINE AT ITS ENTRANCE INTO AN EXISTING MANHOLE. UPON SATISFACTORY COMPLETION OF THE PROJECT, PERMISSION WILL BE GIVEN BY THE CITY ENGINEER TO REMOVE THE PLUG. (SEE SPECIFIC NOTES ON PLAN AND PROFILE SHEETS.)
4. DO NOT BREAK OUT THE EXISTING SEWER PIPE WITHIN ANY MANHOLE BUILT AROUND AN EXISTING SEWER UNTIL PROPER APPROVAL TO DO SO IS GIVEN BY THE CITY ENGINEER. (SEE SPECIFIC NOTES ON PLAN AND PROFILE SHEETS.)
5. ALL STUBS SHALL BE ONE LENGTH OF BELL-END PIPE EXTENDING THRU THE MANHOLE WALL AND SHALL BE TIGHTLY PLUGGED (SEE SPECIFIC NOTES ON PLAN AND PROFILE SHEET.)
6. AT ABANDONED MANHOLES AND SEWERS, PLUG ALL SEWERS AT MANHOLES, TEAR MANHOLES DOWN 3' BELOW FINISHED GROUND ELEVATION, AND FILL BALANCE OF MANHOLES WITH APPROVED BACKFILL.
7. ALL ABANDONED MANHOLE RINGS AND LIDS SHALL BE DELIVERED TO THE CITY OF EDMOND UTILITY LINE MAINTENANCE WASTEWATER DEPARTMENT.
8. PIERS AND COLLARS TO BE BUILT ACCORDING TO EDMOND CITY STANDARD SPECIFICATIONS.
9. ALL FILL AREAS SHOWN ON PROFILE SHALL BE MADE BEFORE CONSTRUCTION OF SEWER.
10. UNLESS OTHERWISE REQUIRED, DENSITY TESTING SHALL BE PERFORMED ON A AVERAGE OF EVERY 200 L.F. OF TRENCH EACH 5 FT. OF DEPTH. DENSITY REQUIREMENTS FOR TRANSVERSE CROSSINGS UNDER PAVING OR DRIVEWAYS SHALL COMPLY WITH THE SCHEDULE SHOWN ON STANDARD CONSTRUCTION PAVING DETAILS.
11. THE CONSTRUCTION OF MONOLITHICALLY CAST-IN-PLACE MANHOLES WILL BE ALLOWED ONLY AS SHOWN ON THE PLANS. THE SUBMITTAL OF PROPOSED LEG SUPPORTS SHALL BE REQUIRED AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
12. PLACEMENT OF CONCRETE STRUCTURES, MANHOLES AND ETC., SHALL COMPLY WITH THE STANDARD SPECIFICATIONS, SECTION 509.04.
13. FORM REMOVAL TIME FOR CAST-IN-PLACE MANHOLES WILL FOLLOW FORM MANUFACTURER'S RECOMMENDATION OR FORM REMOVAL TIME SHALL NOT BE SOONER THAN 4 HOURS WHICHEVER IS LONGER.
14. UPON REMOVAL OF FORMS ALL MANHOLES SHALL BE BACKFILLED WITHIN ONE (1) HOUR.
15. IN LIEU OF THE COLD WEATHER REQUIREMENTS SHOWN IN THE STANDARD SPECIFICATIONS , SECTION 509.04, PLACEMENT OF CONCRETE BELOW GRADE WILL BE ALLOWED TO TEMPERATURES AS LOW AS 25° F. HOWEVER, UNTIL SUCH TIME AS FINAL BACKFILL IS PLACED, ADDITIONAL PROTECTION, INSULATION, HEATING AND ETC. SHALL BE REQUIRED.

14 SEP 2009 10:58 AM
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REVISIONS	ND.	DATE	ITEM CHANGED
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CITY OF EDMOND
ENGINEERING DEPARTMENT
CONSTRUCTION STANDARDS

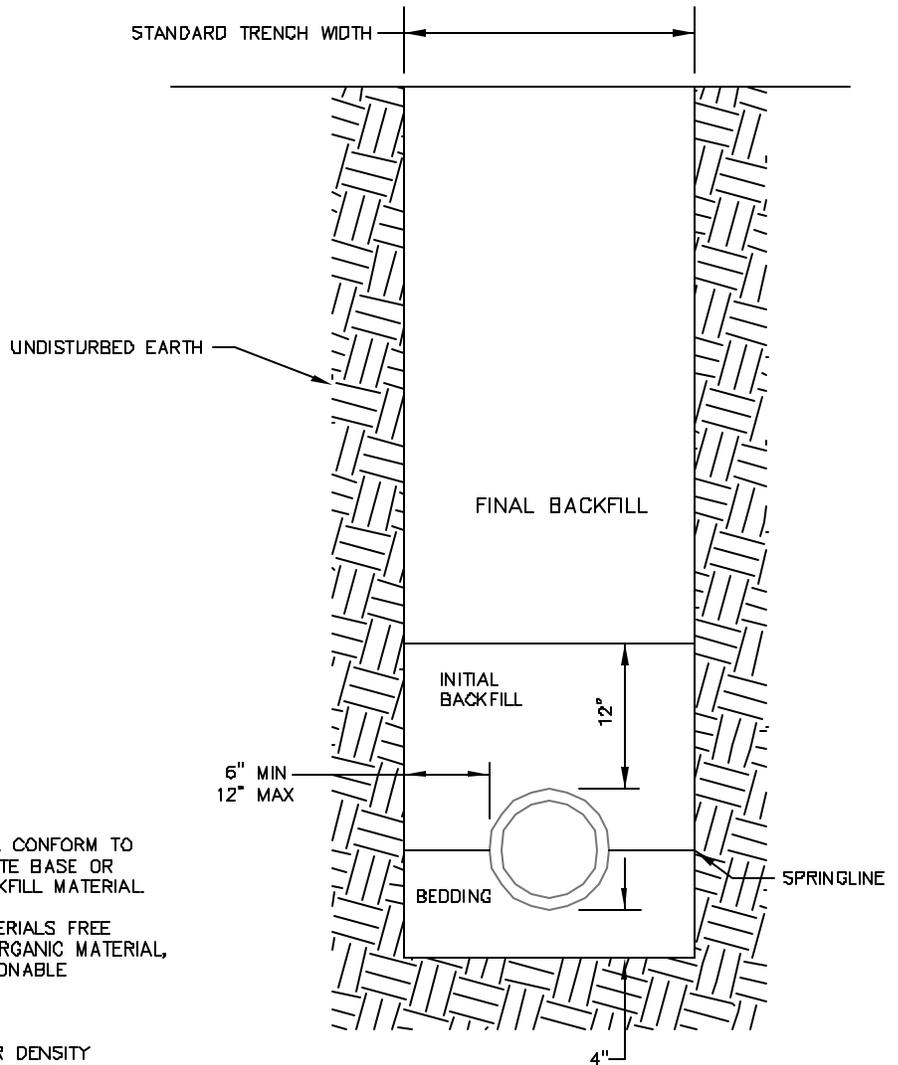
GENERAL NOTES

SEWER

SPECIFICATION NO. 615

SS-01 PAGE 20

INSIDE PIPE DIAMETER (IN.)	STANDARD TRENCH WIDTH (IN.)
8	24
10	30
12	30
15	36
18	36
21	42
24	42
27	48
30	48
36	54
42	60
48	66



NOTES:

1. STANDARD BEDDING MATERIAL (SBM) SHALL CONFORM TO CITY OF EDMOND 703.01, TYPE A AGGREGATE BASE OR CITY OF EDMOND 529, LOW STRENGTH BACKFILL MATERIAL
2. SELECT FILL CONSISTS OF EXCAVATED MATERIALS FREE OF ROCKS LARGER THAN 2-1/2 INCHES, ORGANIC MATERIAL, RUBBISH, DEBRIS, AND ALL OTHER OBJECTIONABLE MATERIAL.
3. COMPACTION REQUIREMENTS:
 - A. PAVED AREAS: 95% STANDARD PROCTOR DENSITY
 - B. NON-PAVED AREAS: 90% STANDARD PROCTOR DENSITY IF COVER DEPTH < 10'. 95% STANDARD PROCTOR DENSITY IF COVER DEPTH > 10'.

BEDDING MATERIALS				
DESCRIPTION	PAVED AREAS		NON-PAVED AREAS	
	FLEXIBLE PIPE	RIGID PIPE	FLEXIBLE PIPE	RIGID PIPE
FINAL BACKFILL	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)	EXCAVATED MATERIAL	EXCAVATED MATERIAL
INITIAL BACKFILL	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)	COVER DEPTH ≤ 10' - SELECT FILL COVER DEPTH ≥ 10' - STAND. BEDDING MATERIAL	SELECT FILL
BEDDING	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)

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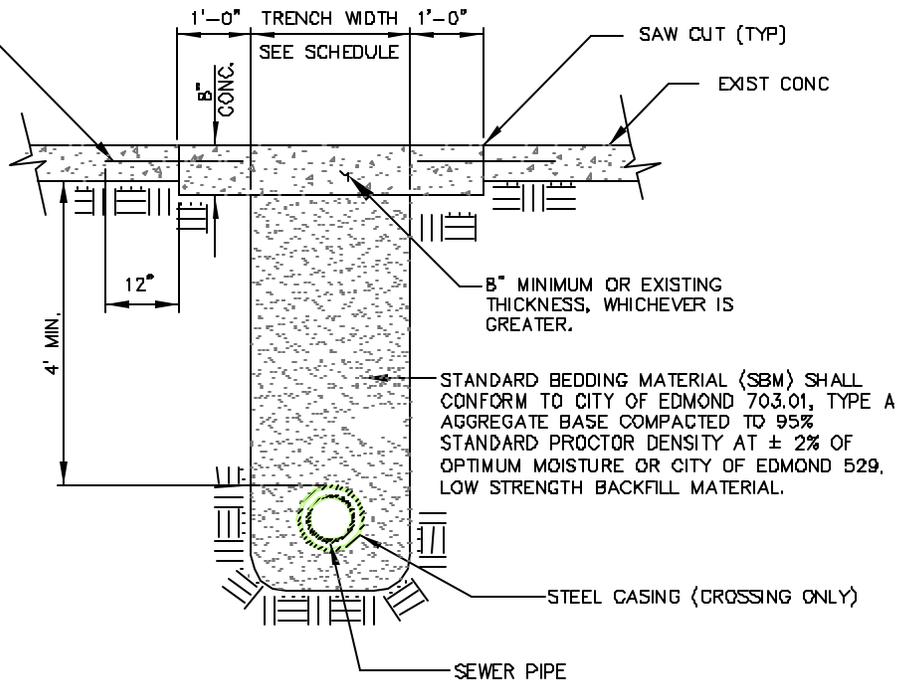
CITY OF EDMOND
ENGINEERING DEPARTMENT
CONSTRUCTION STANDARDS

PIPE
INSTALLATION

SEWER
 SPECIFICATION NO. 615
 SS-02 PAGE 21

15 STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWER PIPE INSTALLATION
 REV. 10, 1998 BY: J. L. MOORE

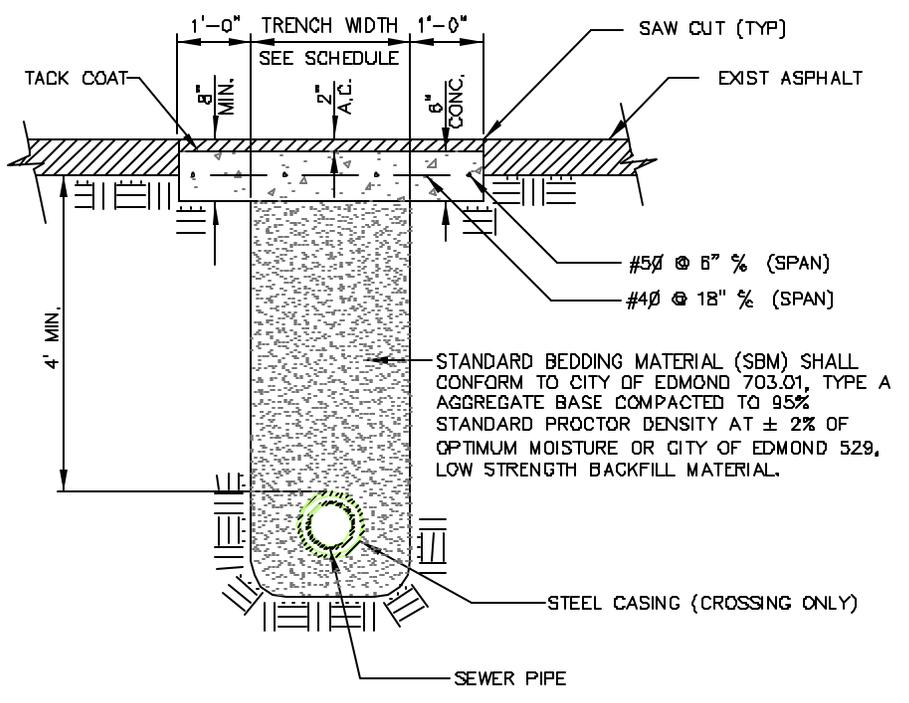
#5 @ 2'-0" BAR 18"±
 DRILLED & SET 12"
 INTO EXIST PAVEMENT.
 DEFORMED TIE BARS.



CONCRETE

TRENCH WIDTH SCHEDULE

INSIDE PIPE DIAMETER (IN.)	STANDARD TRENCH WIDTH (IN.)
8	24
10	30
12	30
15	36
18	36
21	42
24	42
27	48
30	48
36	54
42	60
48	66



ASPHALT

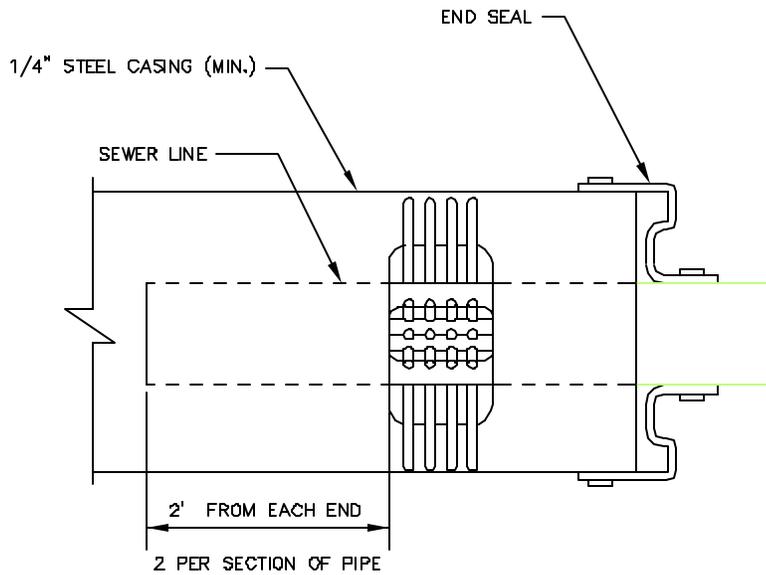
CITY OF EDMOND ENGINEERING DEPARTMENT
 1115 460 PM BUREAU

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CITY OF EDMOND
 ENGINEERING DEPARTMENT
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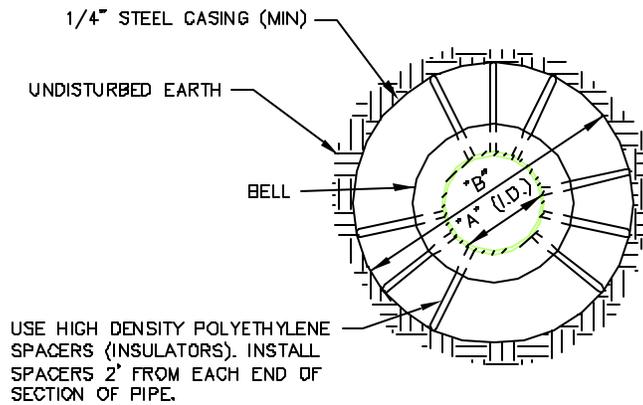
**PAVING CUTS &
 PERMANENT REPAIRS**

SEWER
 SPECIFICATION NO. 615
 SS-03 PAGE 22



PIPE & STEEL CASING SCHEDULE	
PIPE DIAMETER "A"	CASING DIAMETER "B"
4"	10"
6"	12"
8"	14" OR 16"
10"	18"
12"	20"
16"	24"
18"	26"
20"	30"
24"	33"

NOTE: CONSTRUCT WATER TIGHT PLUG AT EACH END OF CASING.



USE HIGH DENSITY POLYETHYLENE SPACERS (INSULATORS). INSTALL SPACERS 2' FROM EACH END OF SECTION OF PIPE.

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CITY OF EDMOND
ENGINEERING DEPARTMENT
CONSTRUCTION STANDARDS

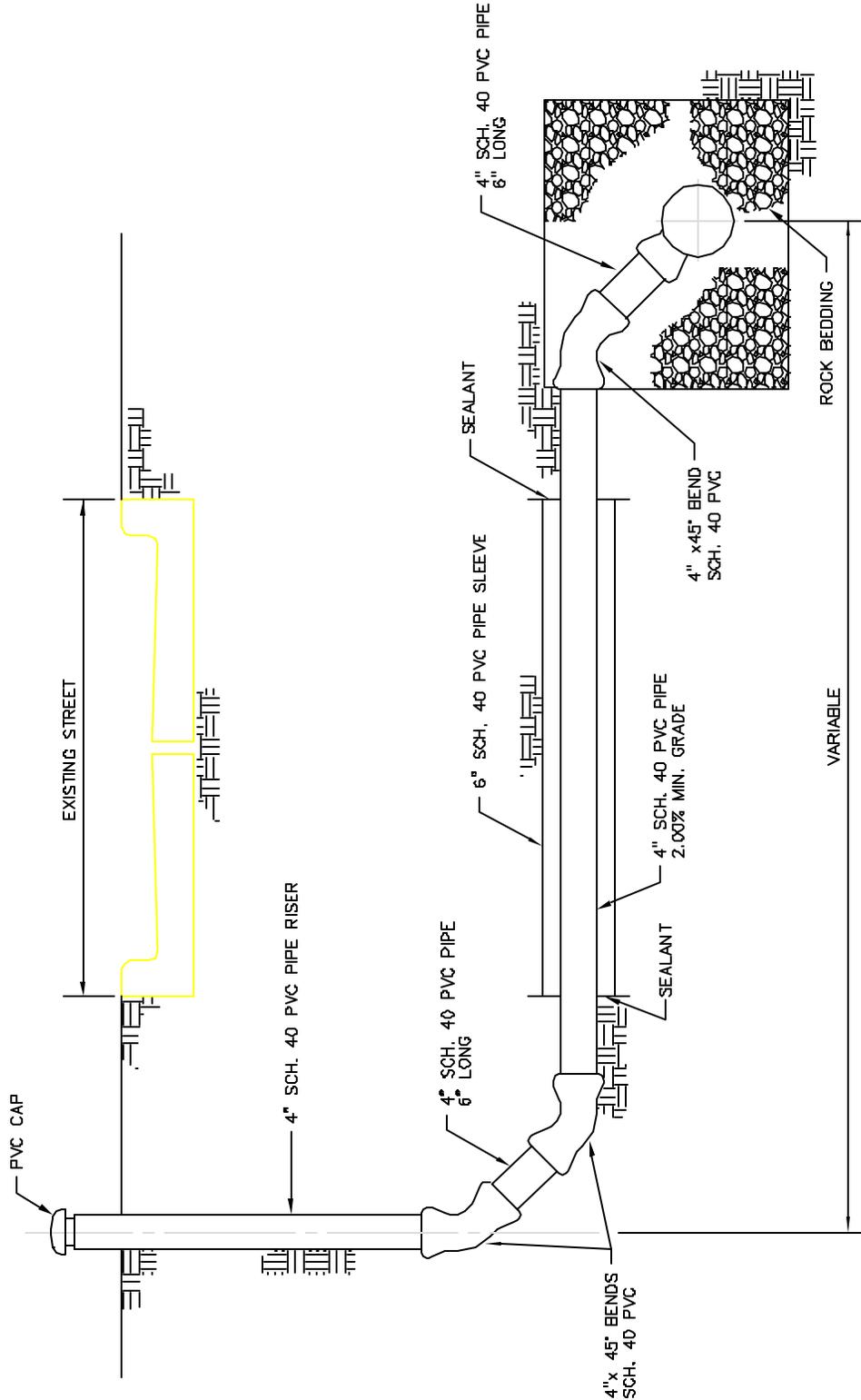
STANDARD ROAD
CROSSING BORE

SEWER

SPECIFICATION NO. 615

SS-04 PAGE 23

NOTE:
 BEDDING GRAVEL SHALL BE COMPOSED OF
 CRUSHED ROCK CONFORMING TO STANDARD
 SPECIFICATIONS, SECTION 703.01, TYPE A OR B.



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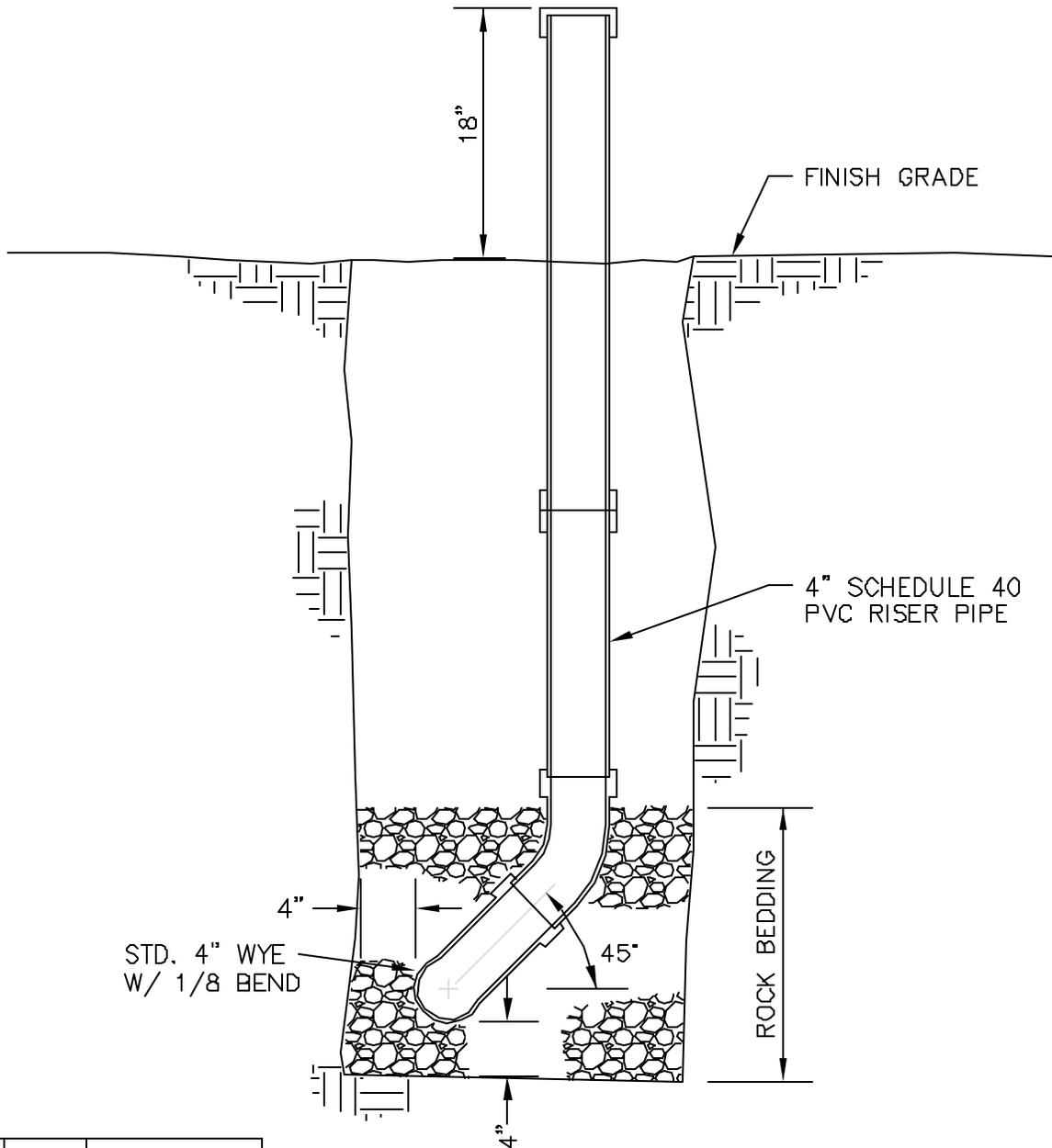
CITY OF EDMOND
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 CONSTRUCTION STANDARDS

LONG SERVICE
 CONNECTION

SEWER
 SPECIFICATION NO. 615
 SS-05 PAGE 24

NOTE:

1. COLLAR MAY BE NEEDED BETWEEN SDR-35 WYE AND SCH. 40 RISER. ALL WYES SHALL BE SIZED TO ACCEPT SCHEDULE 40 PVC PROVIDING A WATER-TIGHT JOINT.
2. BEDDING GRAVEL SHALL BE COMPOSED OF CRUSHED ROCK CONFORMING TO STANDARD SPECIFICATIONS, SECTION 703.01, TYPE A OR B.



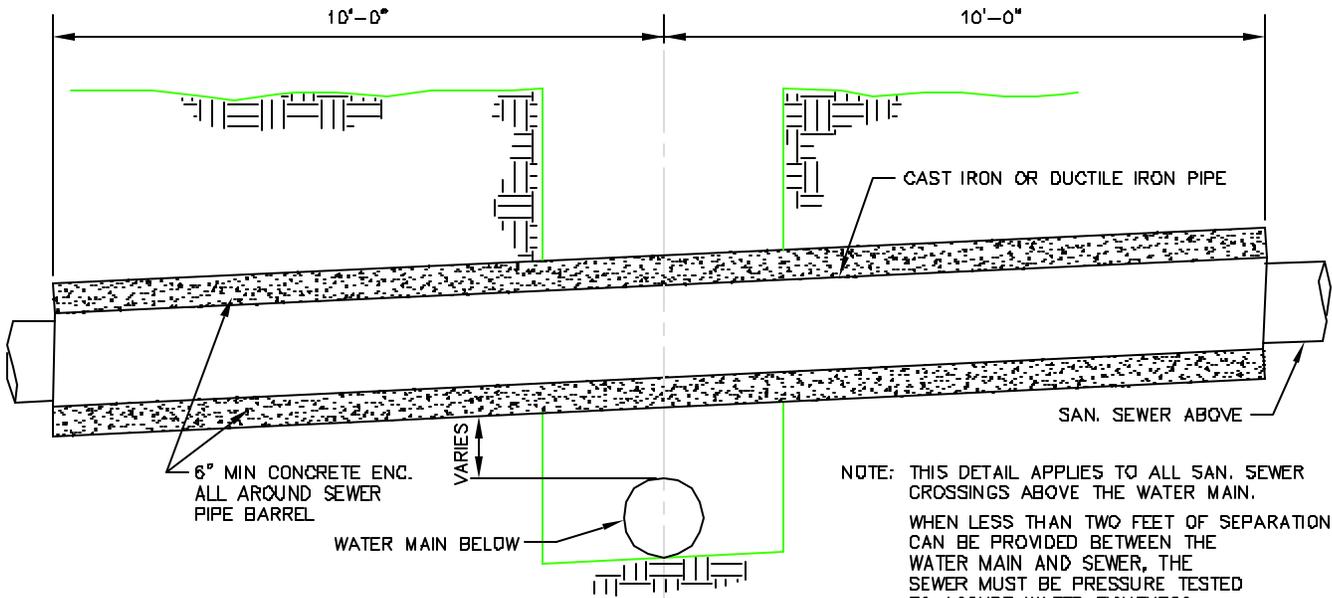
CITY OF EDMOND ENGINEERING DEPARTMENT
 1100 11TH AVENUE, SUITE 200
 EDMOND, OKLAHOMA 73119

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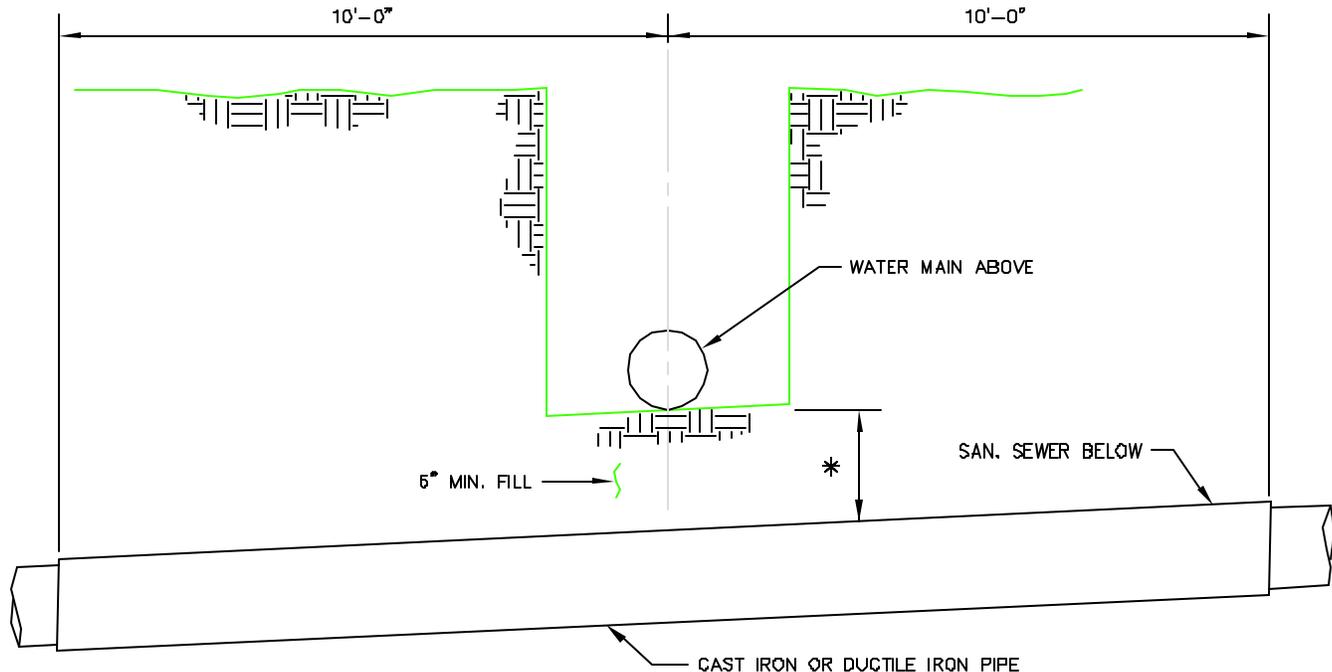
CITY OF EDMOND
 ENGINEERING DEPARTMENT
 CONSTRUCTION STANDARDS

**WYE RISER
SECTION**

SEWER	
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NOTE: THIS DETAIL APPLIES TO ALL SAN. SEWER CROSSINGS ABOVE THE WATER MAIN. WHEN LESS THAN TWO FEET OF SEPARATION CAN BE PROVIDED BETWEEN THE WATER MAIN AND SEWER, THE SEWER MUST BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING PER OKLA. STATE DEPT. OF ENVIRONMENTAL QUALITY CHAPTER 655



* NOTE: THIS DETAIL APPLIES TO ALL SAN. SEWER CROSSINGS WHERE VERTICAL SEPARATION OF WATER MAIN AND SEWER IS TWO FEET OR LESS AND WHEN SAN. SEWER IS BELOW WATER MAIN.

J:\STANDARD\CONSTRUCTION\REV. 11-25-07.DWG
 OCT. 1, 1993 2:50 PM WJH/RSK

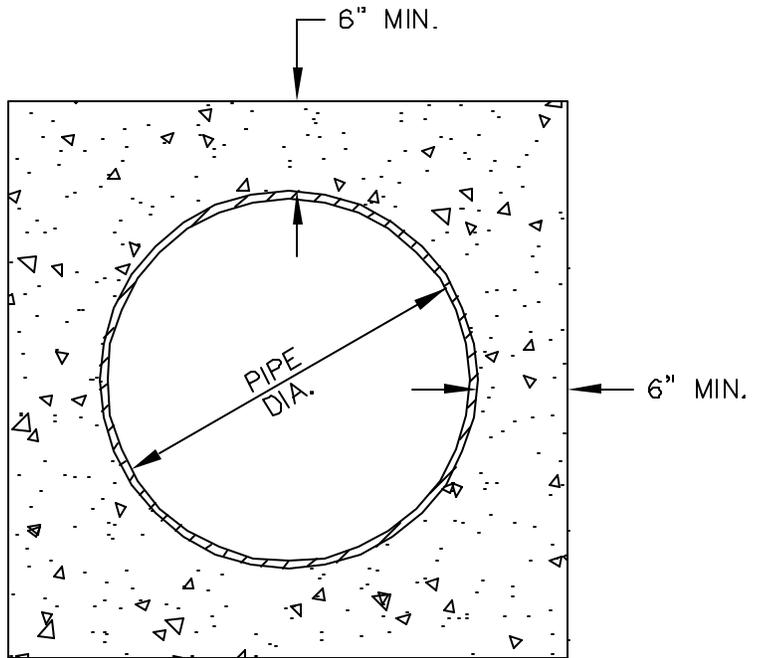
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CITY OF EDMOND
 ENGINEERING DEPARTMENT
 CONSTRUCTION STANDARDS

**SANITARY SEWER
 ENCASEMENT**

SEWER	
SPECIFICATION NO. 615	
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CONCRETE ENCASEMENT DETAIL	
PIPE SIZE	CUBIC YARD OF CONCRETE PER L.F. ENCASEMENT
8"	0.063
10"	0.075
12"	0.0875
15"	0.106
18"	0.127
21"	0.150
24"	0.175
27"	0.197
30"	0.221
33"	0.248
36"	0.271



CONCRETE STRENGTH TO BE PER PIPE MANUFACTURER RECOMMENDATIONS, OR AS APPROVED BY CITY OF EDMOND

REVISIONS	ND.	DATE	ITEM CHANGED

CITY OF EDMOND
ENGINEERING DEPARTMENT
CONSTRUCTION STANDARDS

CONCRETE
ENCASEMENT

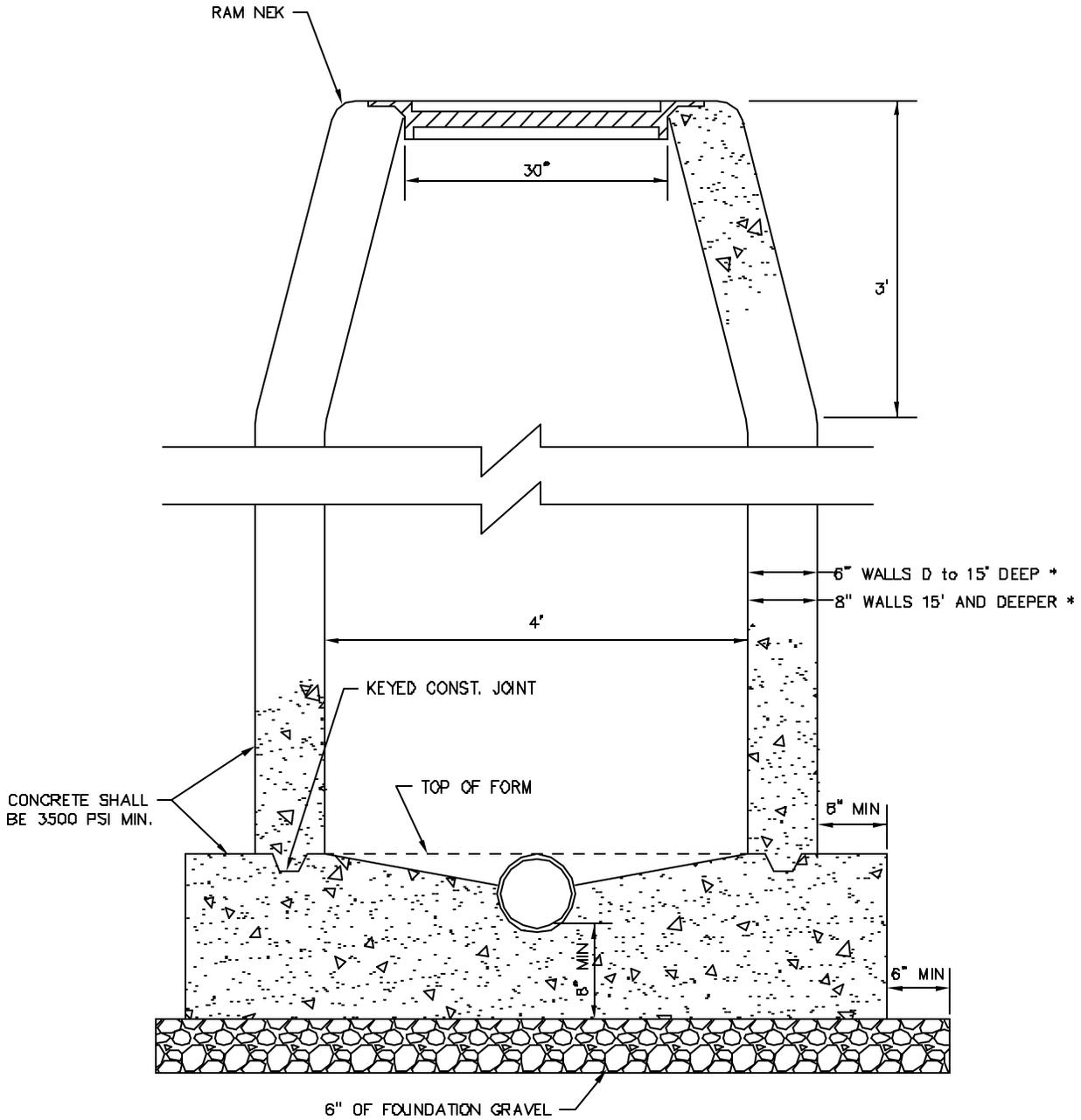
SEWER

SPECIFICATION NO. 615

SS-08 PAGE 27

NOTE:

1. FOUNDATION GRAVEL SHALL BE COMPOSED OF CRUSHED ROCK CONFORMING TO STANDARD SPECIFICATIONS, SECTION 703.01, TYPE A OR B, 1-1/2" MINIMUM SIZE.
- * MANHOLE WALL THICKNESS SHALL BE CONSTANT. NO TRANSITION SHALL BE ALLOWED



STANDARD MANHOLE SPEC. 615-09-01
 OCT. 1, 1988 2:30 PM WJH/RSK

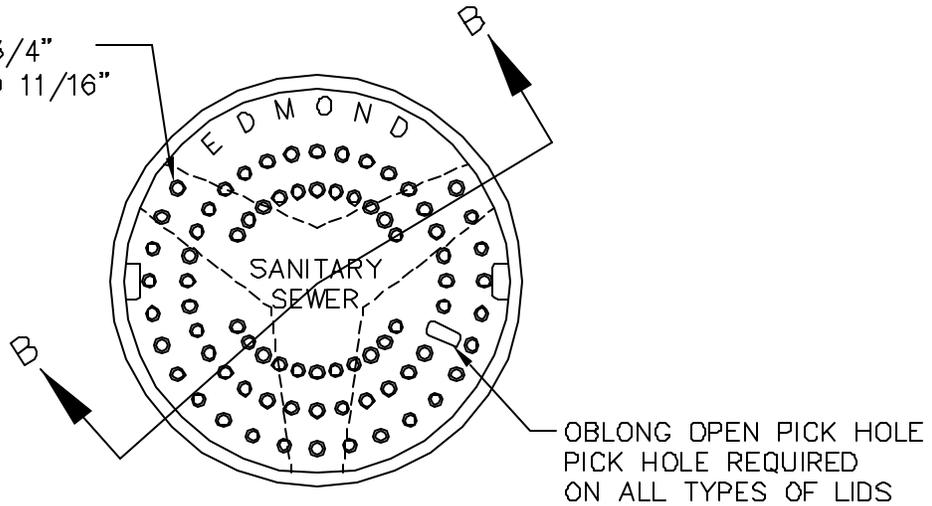
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CITY OF EDMOND
 ENGINEERING DEPARTMENT
 CONSTRUCTION STANDARDS

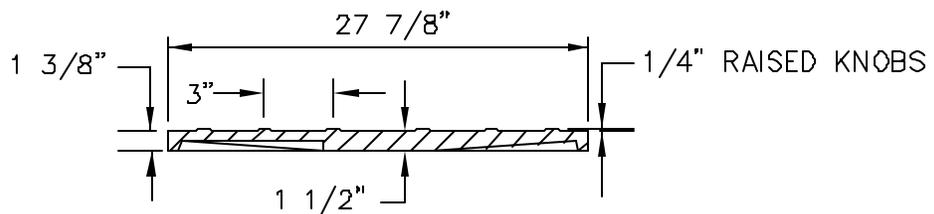
**STANDARD
 MANHOLE**

SEWER	
SPECIFICATION NO. 615	
SS-09	PAGE 28

BOSSES 3/4"
TAPER TO 11/16"



TOP VIEW



NOTE:

1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.
2. ALL LETTERING ON TOP OF COVER IS 1 7/16"

SECTION B-B

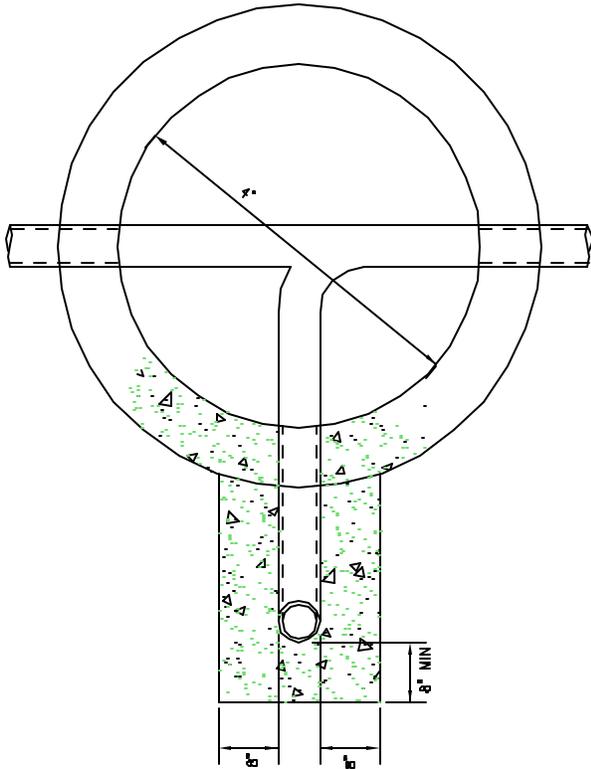
CITY OF EDMOND
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 1115 460 PM BUREAU

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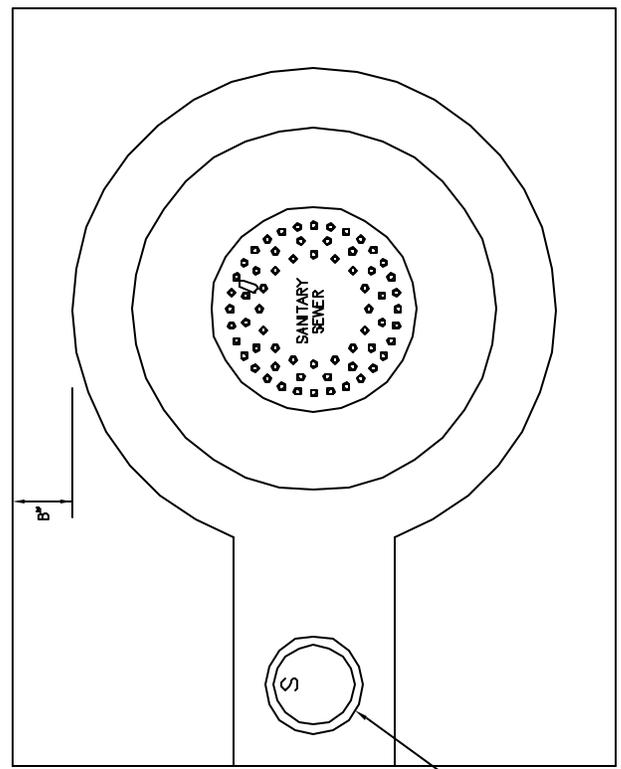
CITY OF EDMOND
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 CONSTRUCTION STANDARDS

**MANHOLE
COVER**

SEWER	
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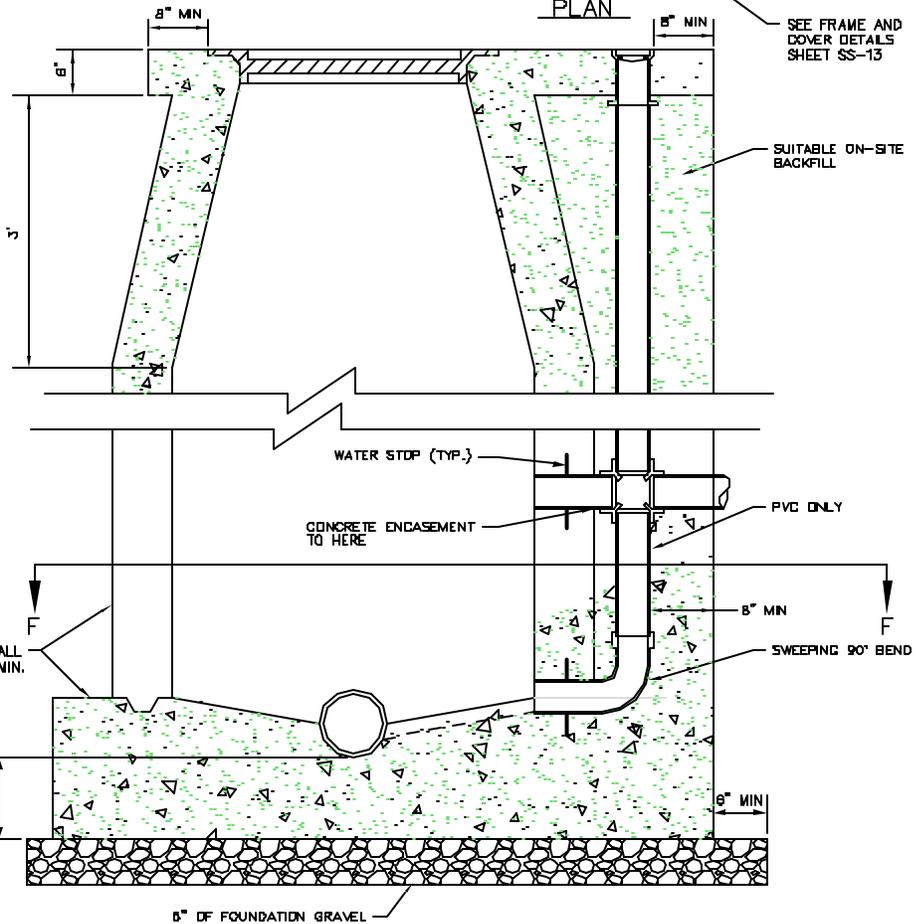


SECTION F-F



PLAN

SEE FRAME AND COVER DETAILS SHEET SS-13



NOTE:

1. FOUNDATION GRAVEL SHALL BE COMPOSED OF CRUSHED ROCK CONFORMING TO STANDARD SPECIFICATIONS, SECTION 703.01, TYPE A OR B, 1-1/2" MINIMUM SIZE.
2. ENCASE DROP CONNECTION WITH CONCRETE.
3. SEE PLANS FOR ADDITIONAL NOTES AND DETAILS.
4. REFER TO STANDARD MANHOLE FOR ADDITIONAL NOTES AND DETAILS.

CONCRETE SHALL BE 3500 PSI MIN.

8" OF FOUNDATION GRAVEL

REVISIONS	NO.	DATE	ITEM CHANGED

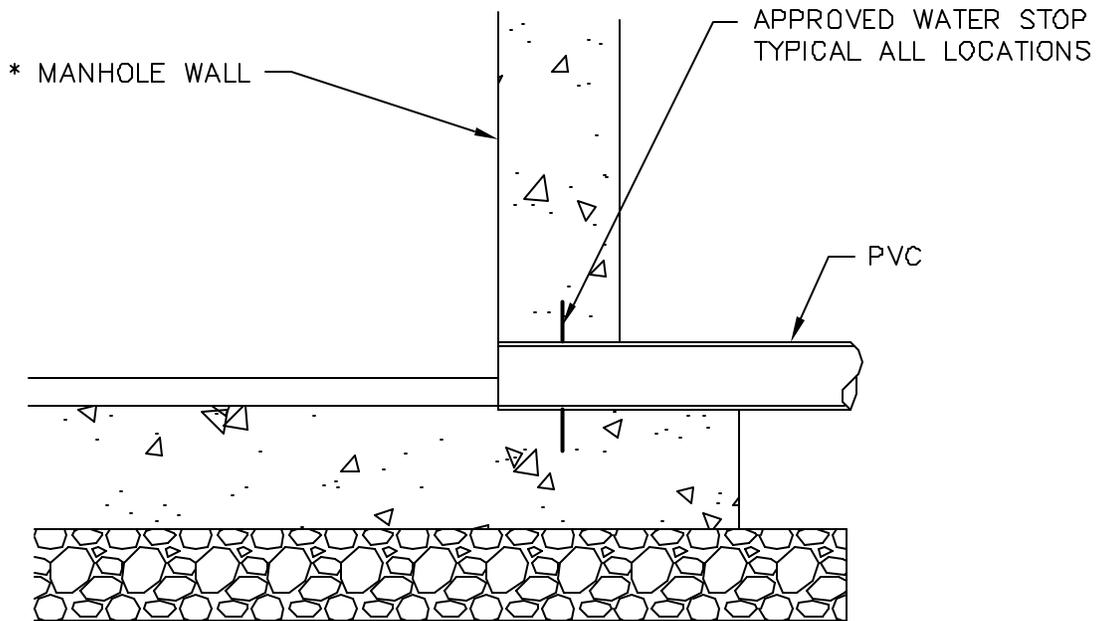
CITY OF EDMOND
ENGINEERING DEPARTMENT
CONSTRUCTION STANDARDS

STANDARD DROP
MANHOLE

SEWER

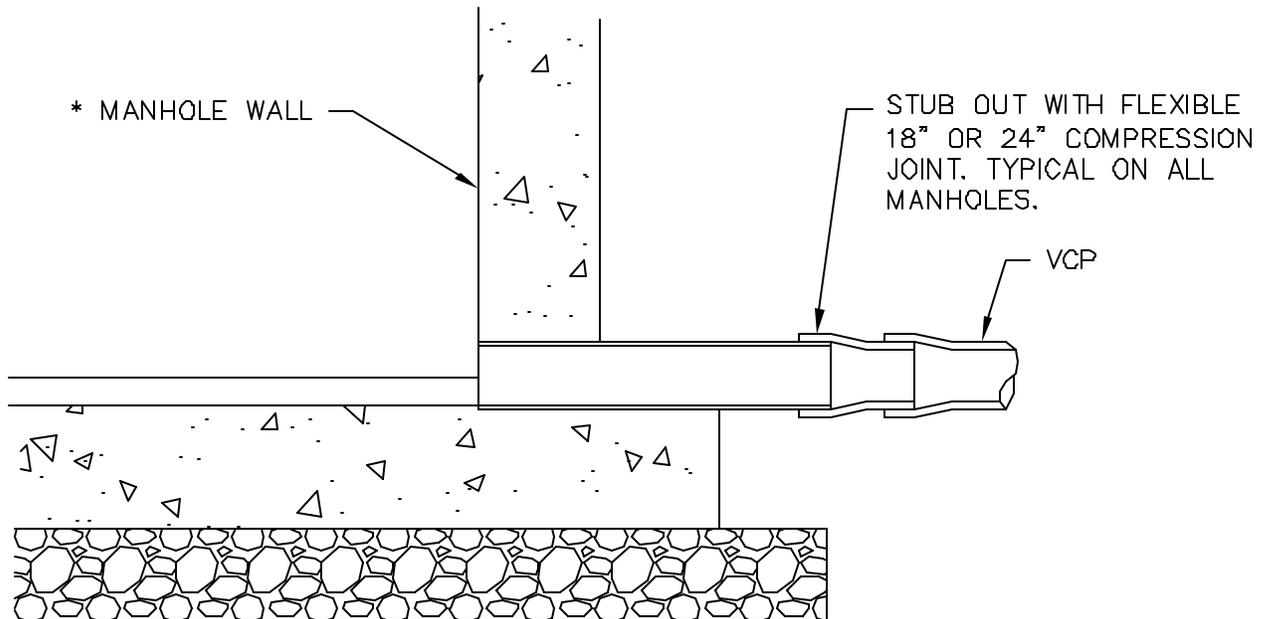
SPECIFICATION NO. 615

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PVC PIPE DETAILS

NOTE:
 COMPRESSION JOINTS AND COUPLINGS SHALL BE ASSEMBLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. JOINTS AND COUPLINGS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH ASTM-C425.
 * MANHOLE WALL THICKNESS SHALL BE CONSTANT. NO TRANSITION SHALL BE ALLOWED.



VITRIFIED CLAY PIPE (VCP) DETAILS

STANDARD SPECIFICATIONS FOR CONSTRUCTION
 OCT. 1, 1988 2:50 PM 10/88

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CITY OF EDMOND
 ENGINEERING DEPARTMENT
 CONSTRUCTION STANDARDS

**VITRIFIED CLAY &
 PVC PIPE**

SEWER	
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