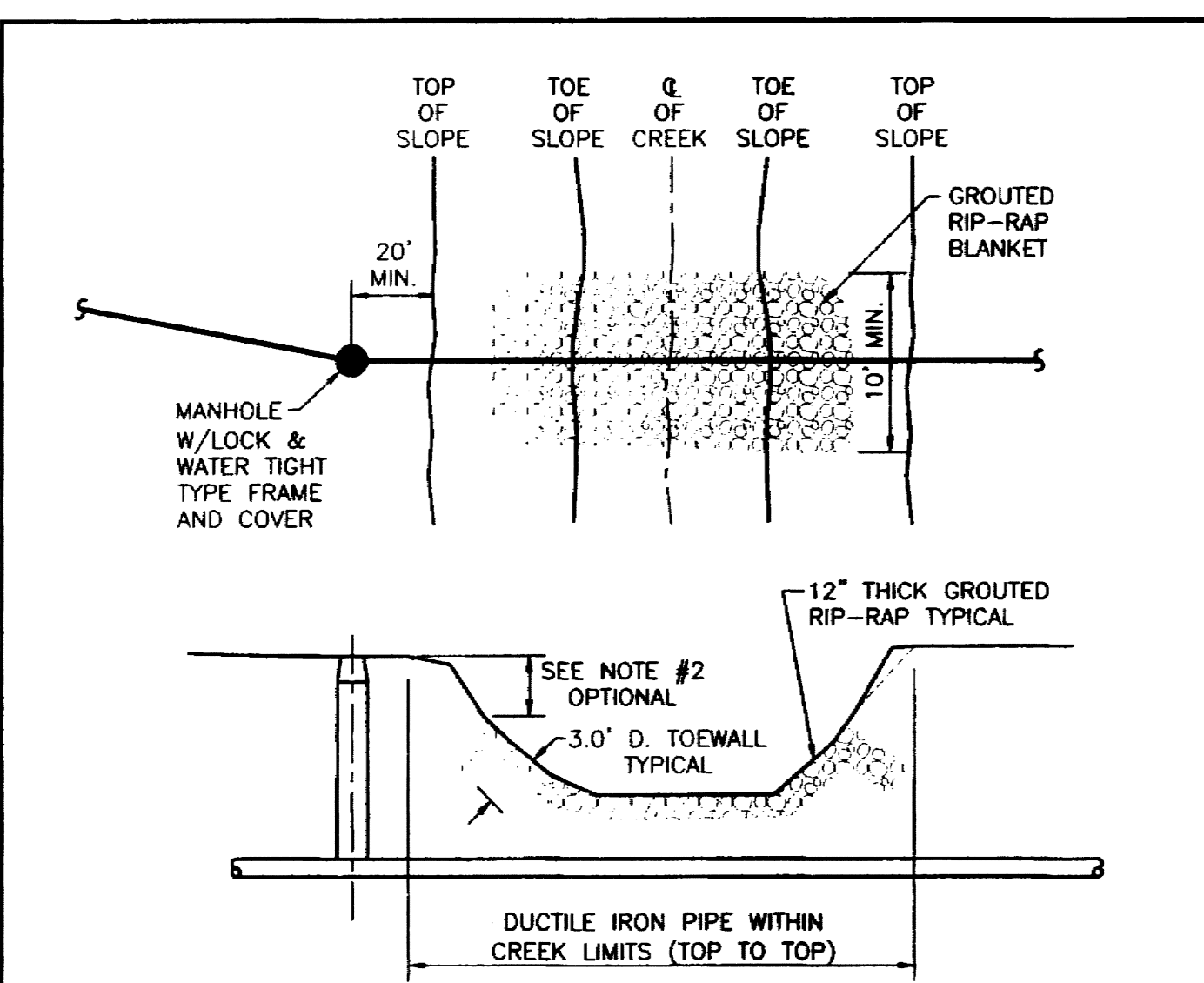


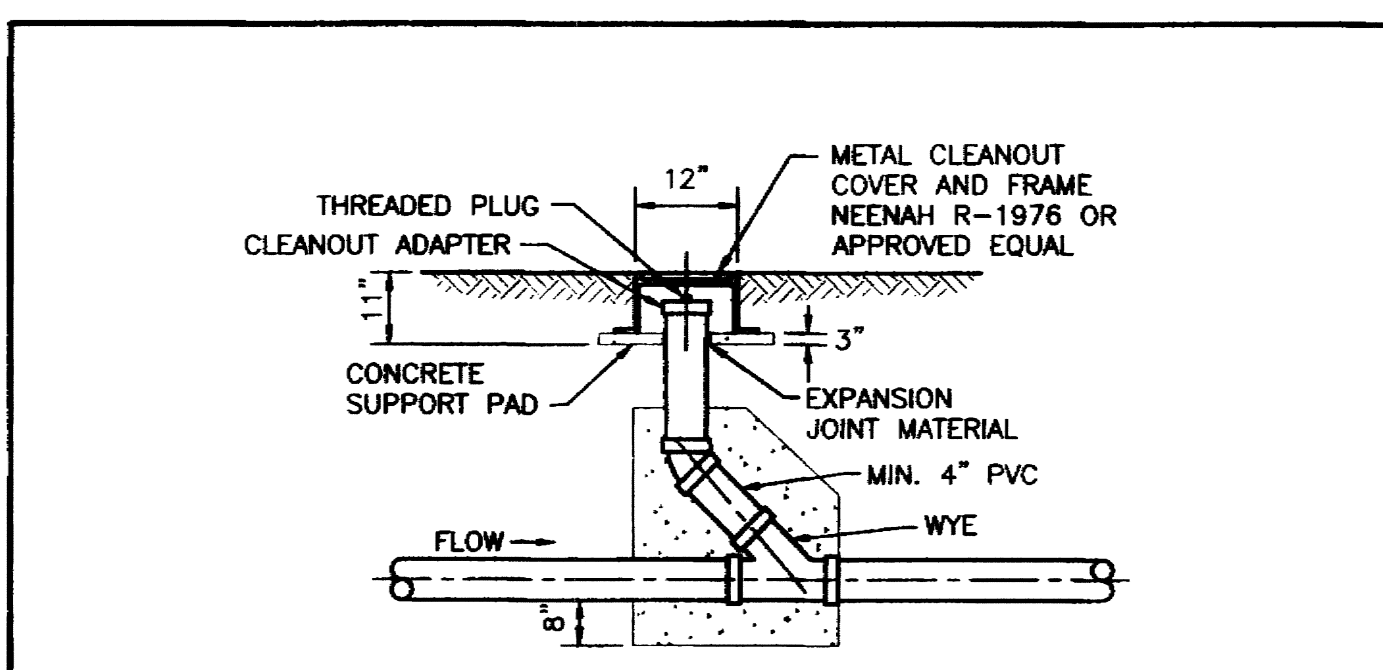
ISSUE	DATE / REMARKS
1	3-3-2015 Initial Submittal
2	5-7-2015 City Comments
3	6-26-2015 City & PWSD #2 Comments
4	11-9-2015 City Comments
5	12-10-2015 City Comments



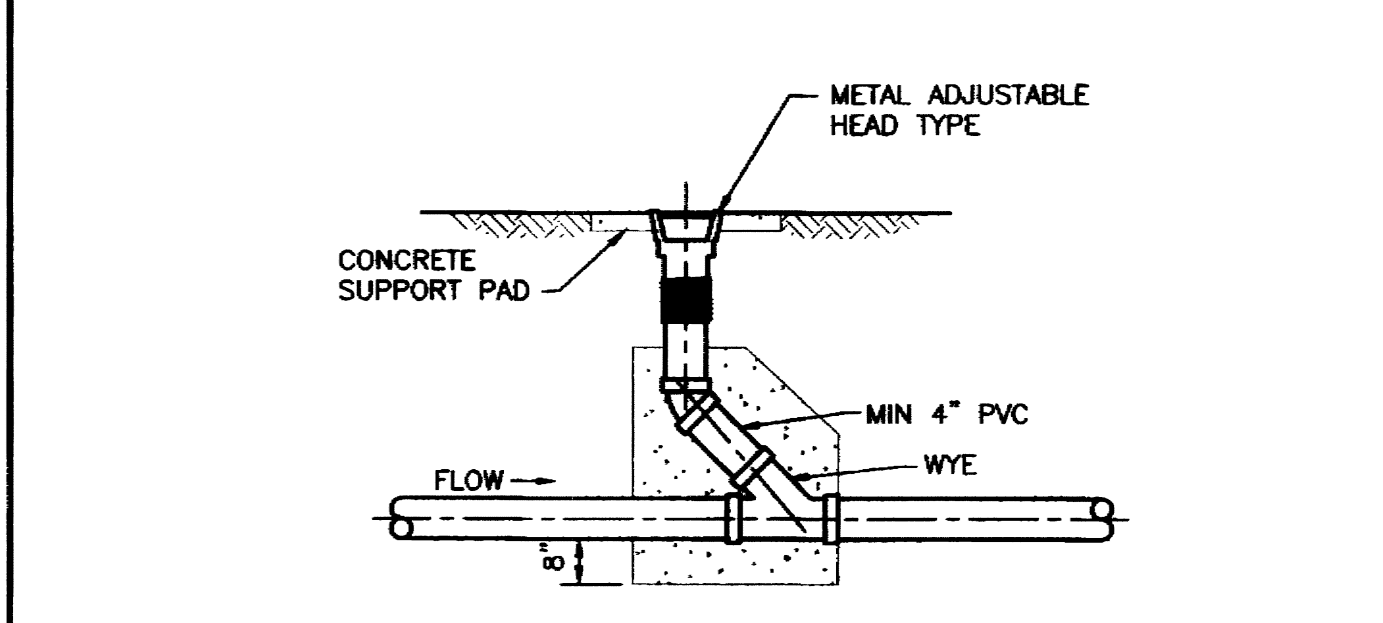
- NOTES:
1. GROUTED RIP-RAP IS REQUIRED AT ALL CREEK CROSSINGS WHERE THE EMBANKMENTS CROSSED ARE STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL RATIO SLOPE; AND ALSO WHERE THERE IS 3 FEET OR LESS COVER OVER THE TOP OF THE SEWER MAIN.
  2. PLACE RIP-RAP ON LOWER 3/4 OF SLOPE. GRADE UPPER 1/4 OF SLOPE AT 1 VERTICAL TO 2 HORIZONTAL SLOPE FOR SOD OR 1 VERTICAL TO 2.5 HORIZONTAL SLOPE FOR SEED AND STRAW.
  3. RIP-RAP TO BE 'MSD 5' GRADATION, MINIMUM 12" THICK, GROUTED WITH 8 SACK MIX. SAND-CEMENT SLURRY, BROOM FINISH.
  4. INCORPORATE A 3 FEET DEEP TOE WALL ON EMBANKMENT'S UPPER EDGE OF RIP-RAP.
  5. TOP SURFACE OF RIP-RAP SHOULD NOT BE HIGHER THAN ADJACENT GROUND SURFACE.
  6. IF PIPE HAS LESS THAN 12" COVER, A PAVED CHANNEL MAY BE REQUIRED.
  7. DUCTILE IRON PIPE IS REQUIRED WITHIN THE CREEK LIMITS.

**Duckett Creek Sanitary District**

TYPICAL CREEK CROSSING	Des By: BSM	App By: KLA	Detail No. 24
	Chk By: MDOB	Date: 1-8-01	



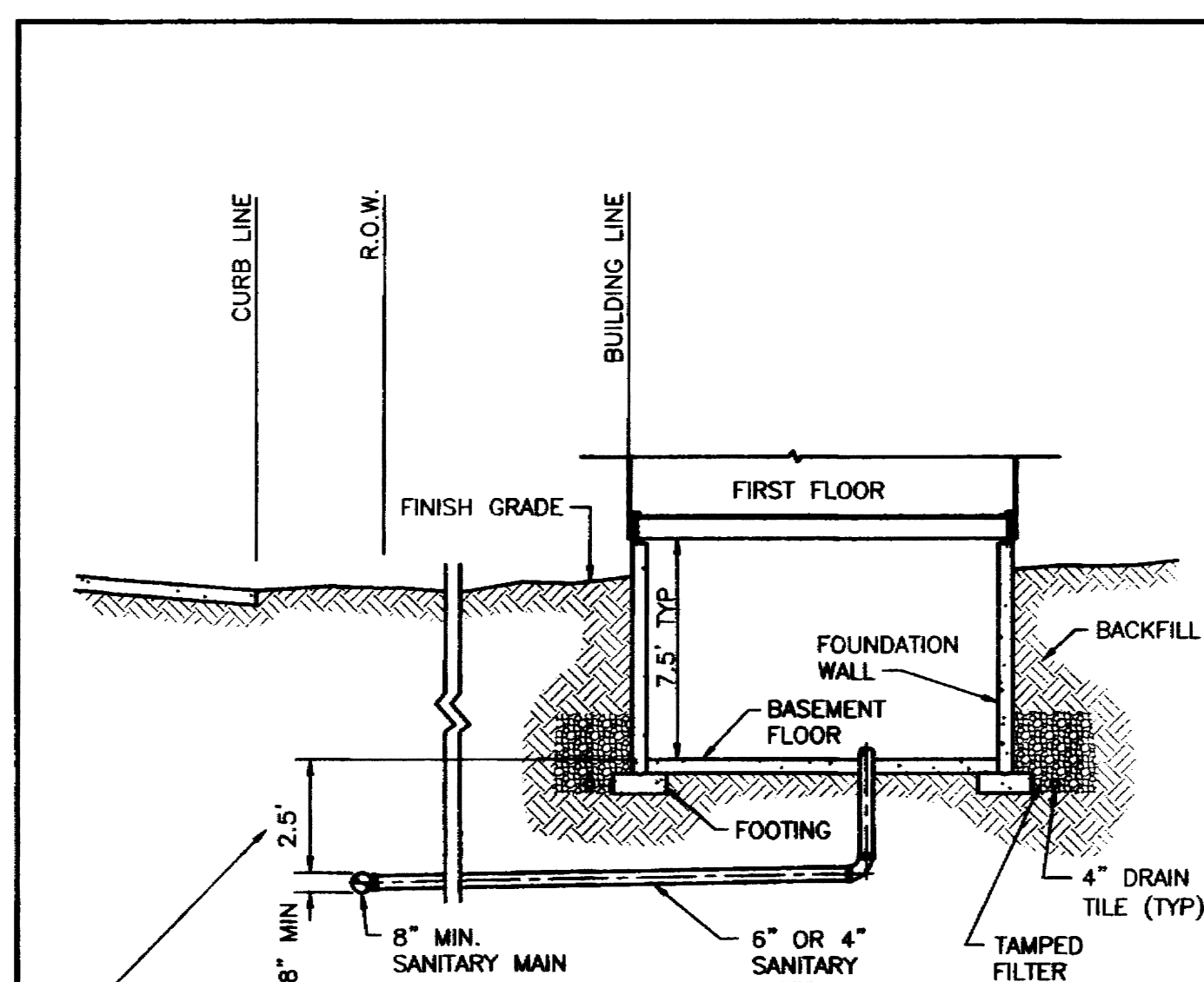
**METAL FRAME AND COVER TYPE CLEANOUT**



**ADJUSTABLE HEAD TYPE CLEANOUT**

**Duckett Creek Sanitary District**

TYPICAL SEWER LATERAL CLEANOUT DETAILS	Des By: BSM	App By: KLA	Detail No. 25
	Chk By: MDOB	Date: 1-8-01	

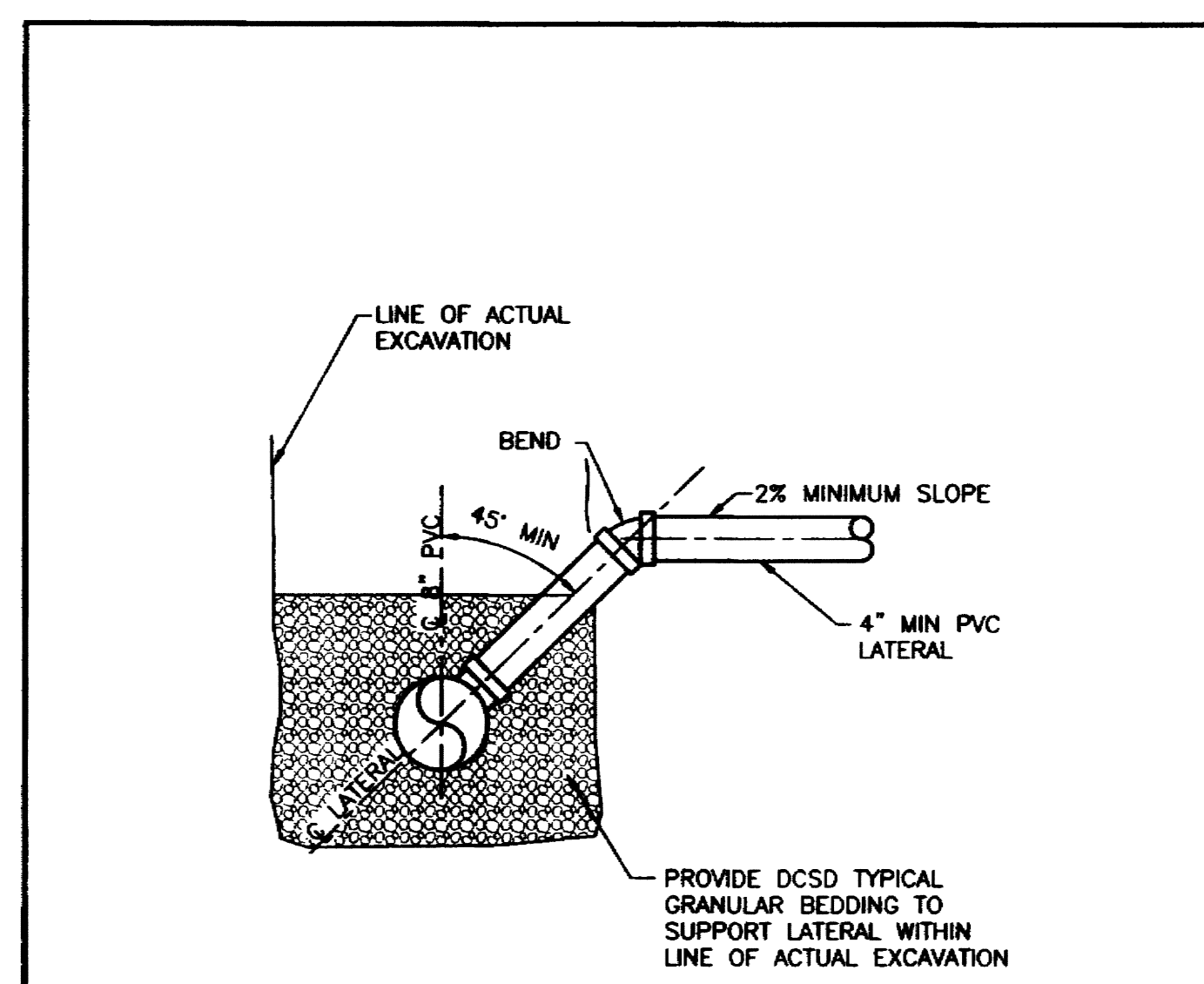


\*NOTE: DIFFERENCE IN DEPTH INCREASES WITH PIPE SIZE

**Duckett Creek Sanitary District**

**TYPICAL SANITARY SEWER LATERAL PROFILE**

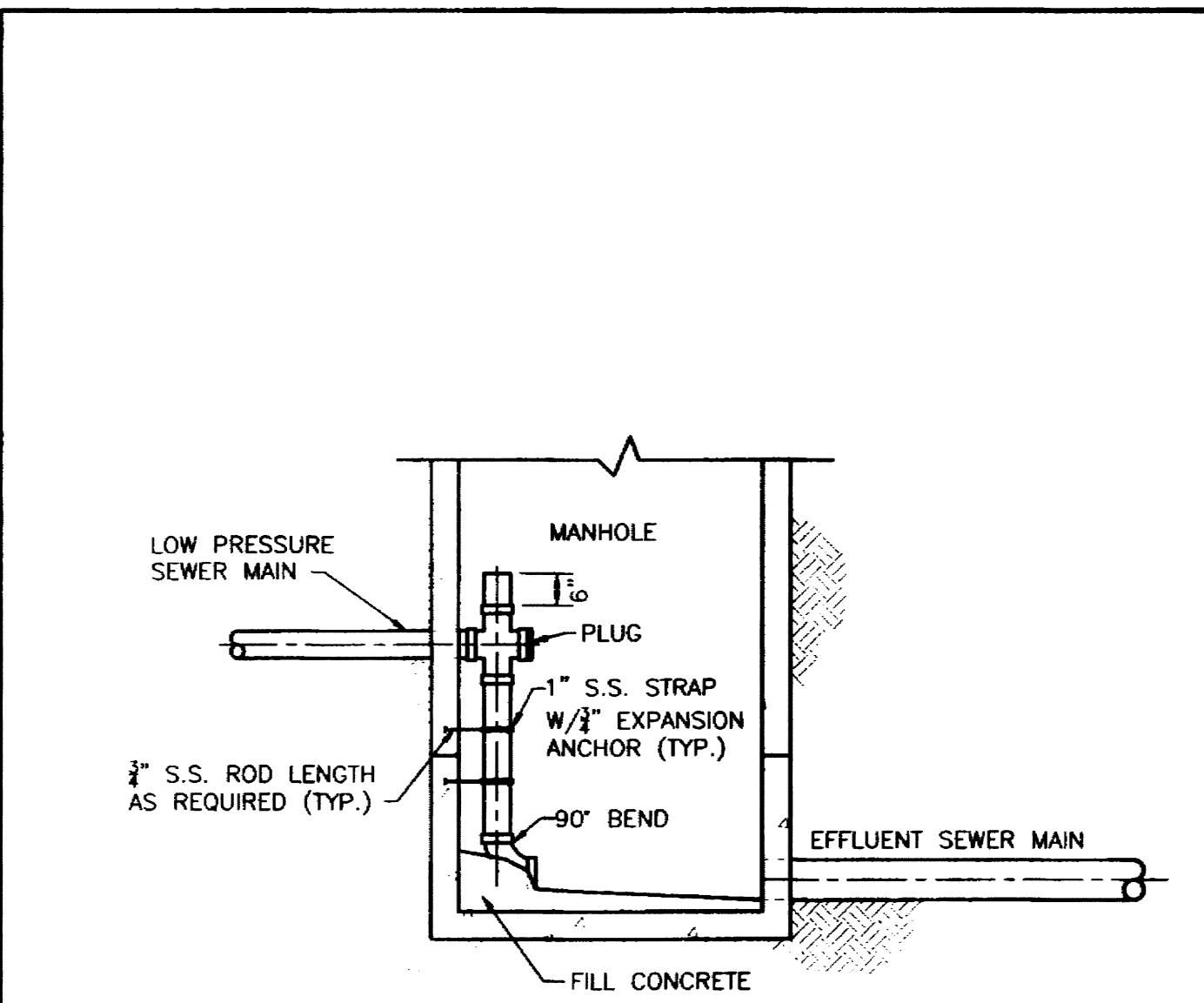
	Des By: BSM	App By: KLA	Detail No. 26
	Chk By: MDOB	Date: 1-9-01	



**Duckett Creek Sanitary District**

**SANITARY SEWER LATERAL RISER DETAIL**

	Des By: BSM	App By: KLA	Detail No. 27
	Chk By: MDOB	Date: 1-9-01	

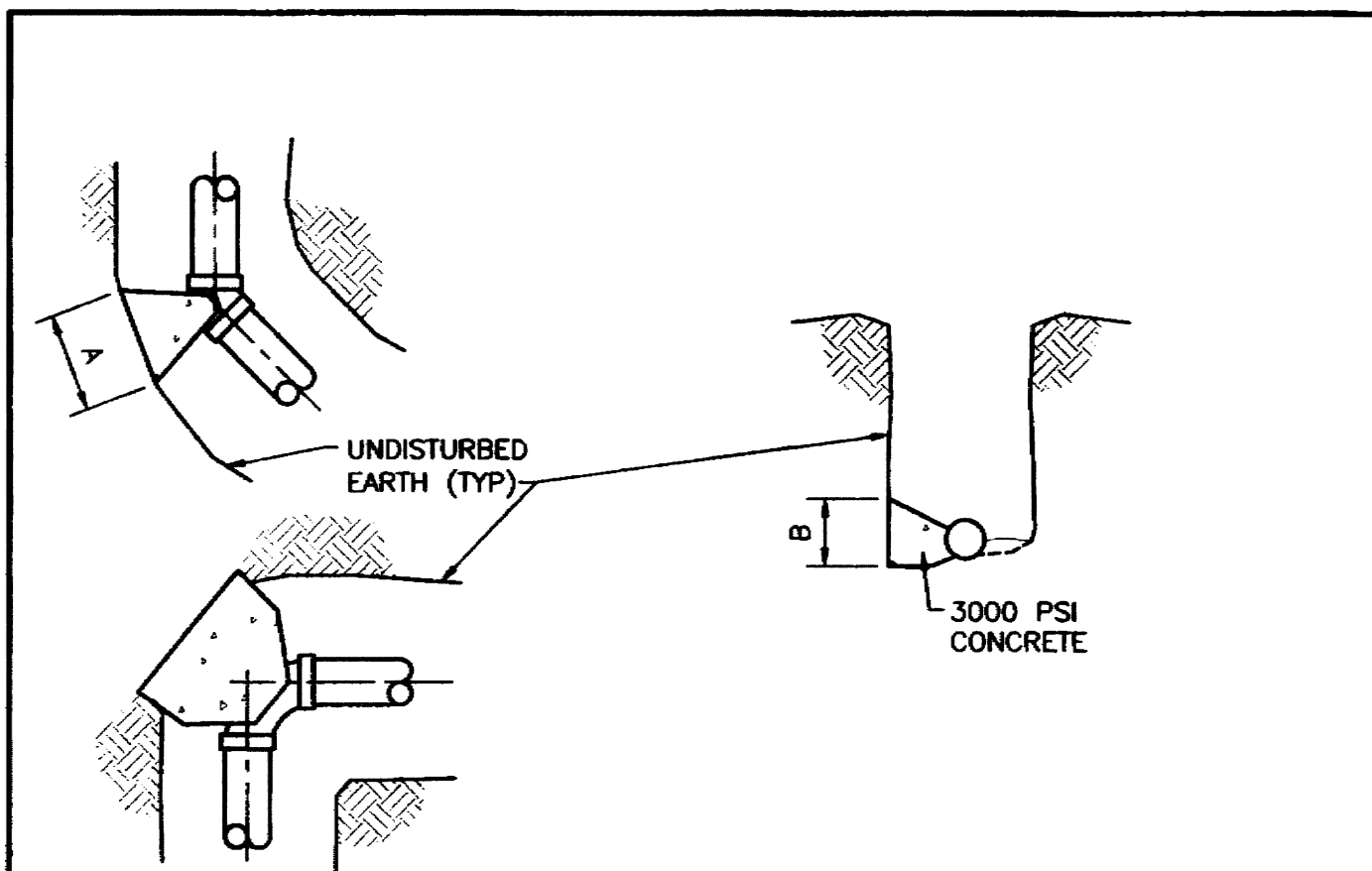


NOTE: INVERT-BOTTOM SHALL BE WORKED TO PROVIDE POSITIVE DRAINAGE THROUGH MANHOLE

**Duckett Creek Sanitary District**

**LOW PRESSURE SEWER MAIN CONNECTION AT MANHOLE**

	Des By: BSM	App By: KLA	Detail No. 28
	Chk By: MDOB	Date: 1-9-01	



MAIN SIZE	A x B 22 1/2"	A x B 45"	A x B 90"	A x B TEE
2"	.5' x 1'	.5' x 1'	1' x 1'	1' x 1'
4"	1' x 1'	1' x 1'	1.5' x 1'	1' x 1'
6"	1' x 1'	1.5' x 1'	2' x 1'	1.5' x 1'
8"	1' x 1'	2' x 1'	2' x 1'	2' x 1'

**Duckett Creek Sanitary District**

**THRUST BLOCK DETAIL AND SIZE SCHEDULE**

	Des By: BSM	App By: KLA	Detail No. 29
	Chk By: MDOB	Date: 1-9-01	

PROJECT TITLE

*The Villages at Shady Creek*

OFFALLON, MISSOURI

**THE STERLING CO.**  
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Corporate Certificate of Authority #001348



Date: 12/10/2015  
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Civil Engineer

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SANITARY SEWER DETAILS

P+Z No. P&Z NO  
City No. 15-162-SP  
Date: 12/10/2015  
Job No. 14-03-087

Page No.  
**DTL-6**

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