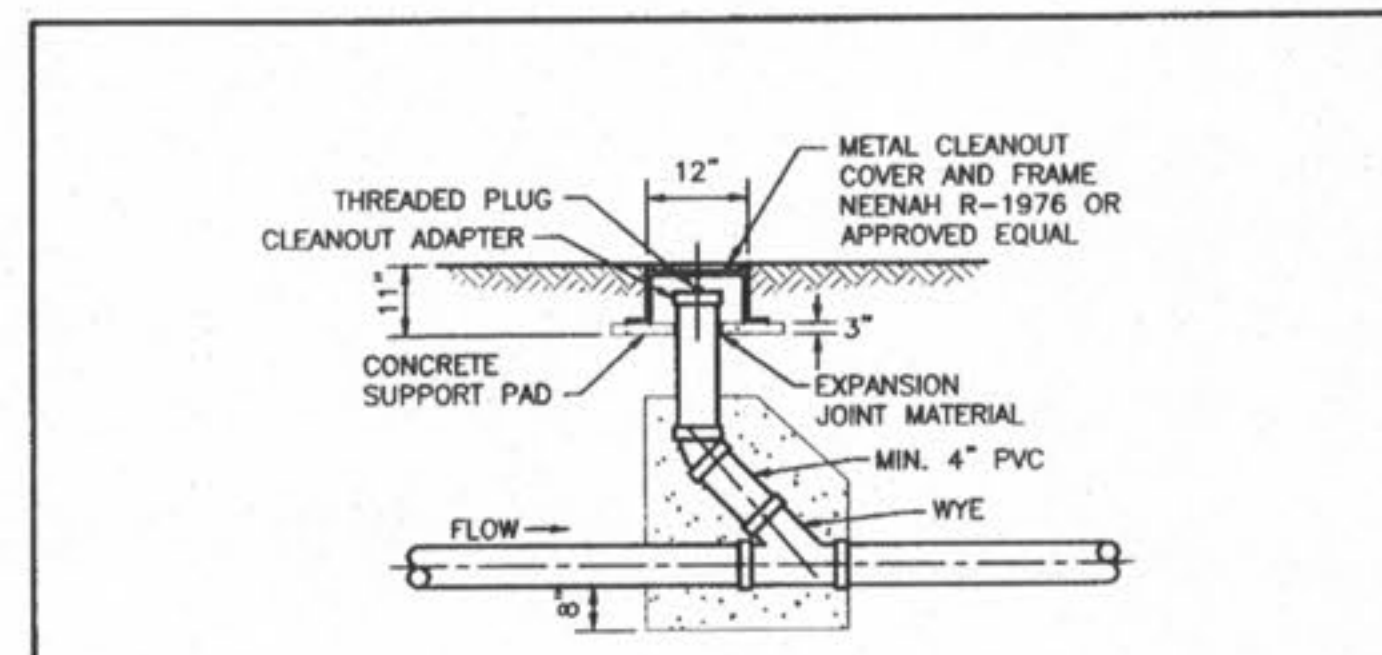


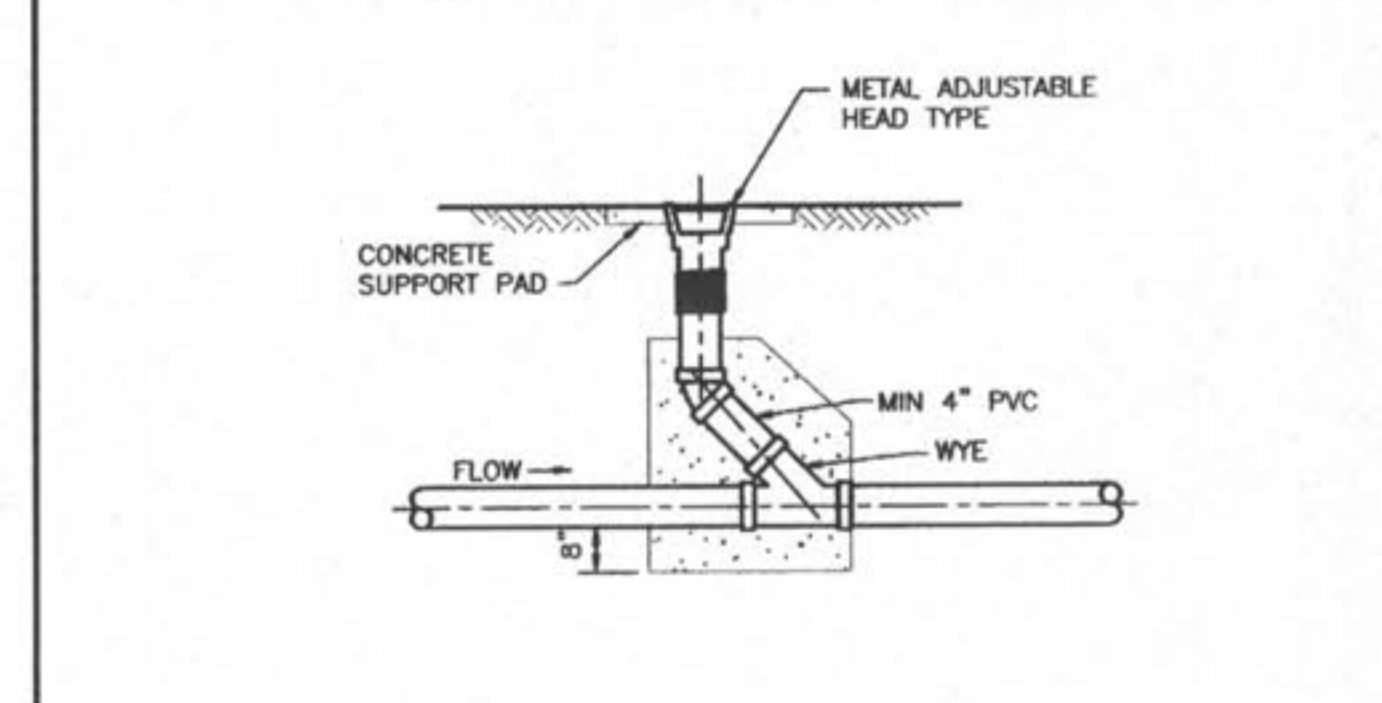
- NOTES:
1. GROUTED RIP-RAP IS REQUIRED AT ALL CREEK CROSSINGS WHERE THE EMBANKMENTS CROSSED ARE STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL RATIO SLOPE; AND ALSO WHERE THERE IS 3 FEET OR LESS COVER OVER THE TOP OF THE SEWER MAIN.
 2. PLACE RIP-RAP ON LOWER 3/4 OF SLOPE. GRADE UPPER 1/4 OF SLOPE AT 1 VERTICAL 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
	Chd By: MDOB	Date: 1-8-01	



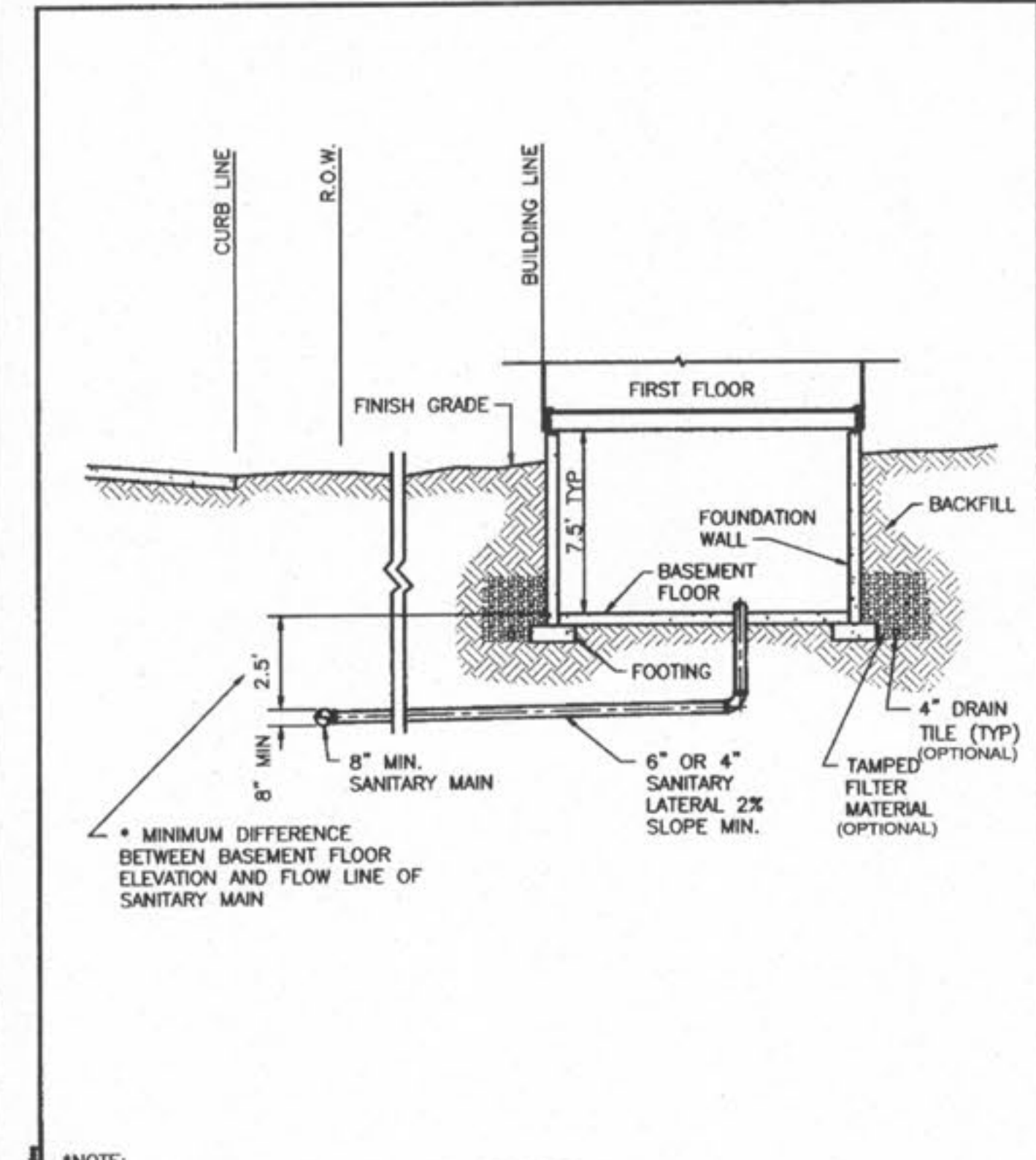
METAL FRAME AND COVER TYPE CLEANOUT



ADJUSTABLE HEAD TYPE CLEANOUT

Duckett Creek Sanitary District

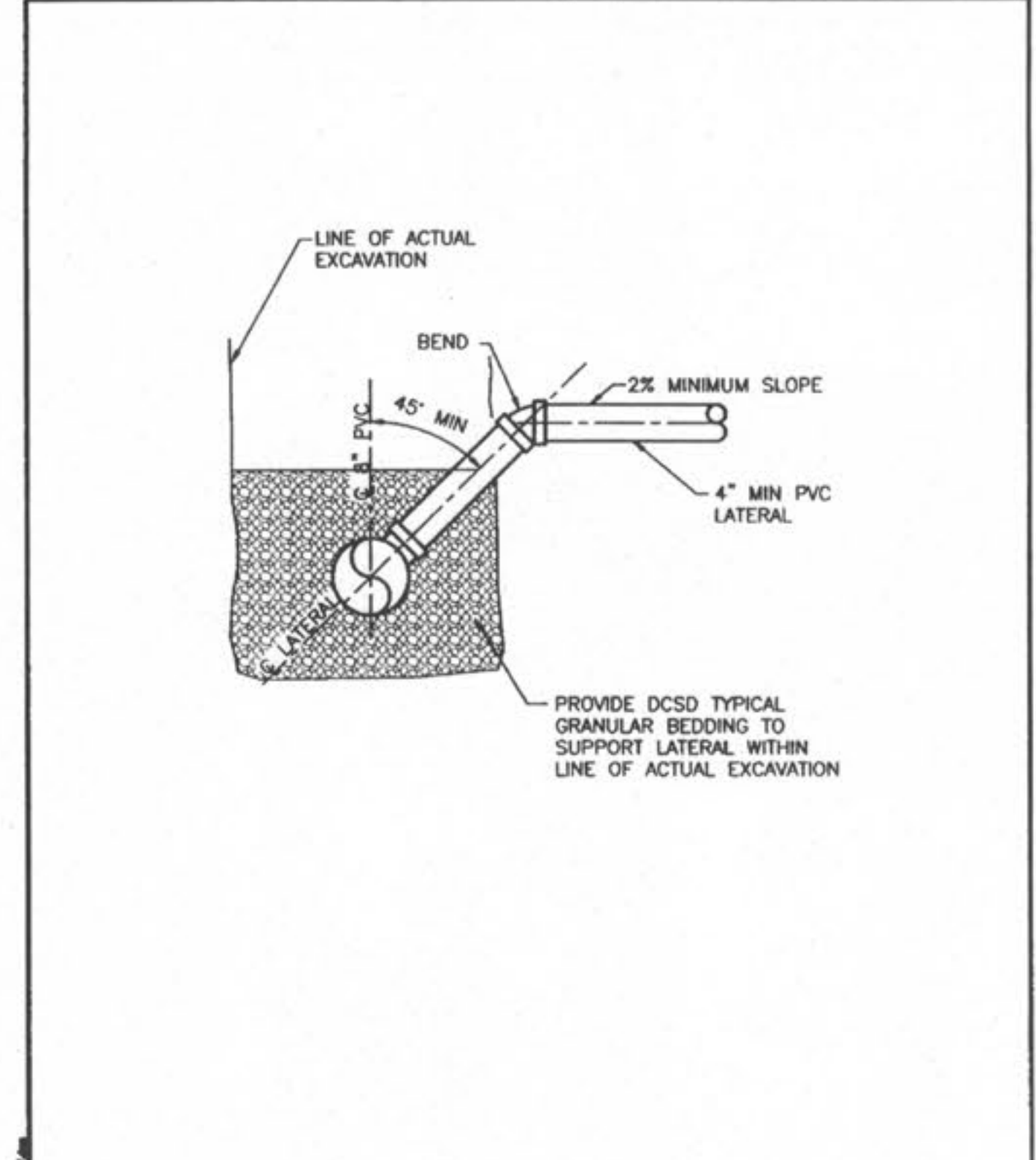
TYPICAL SEWER LATERAL CLEANOUT DETAILS	Des By: BSM	App By: KLA	Detail No. 25
	Chd By: MDOB	Date: 1-8-01	



*NOTE: DIFFERENCE IN DEPTH INCREASES WITH PIPE SIZE

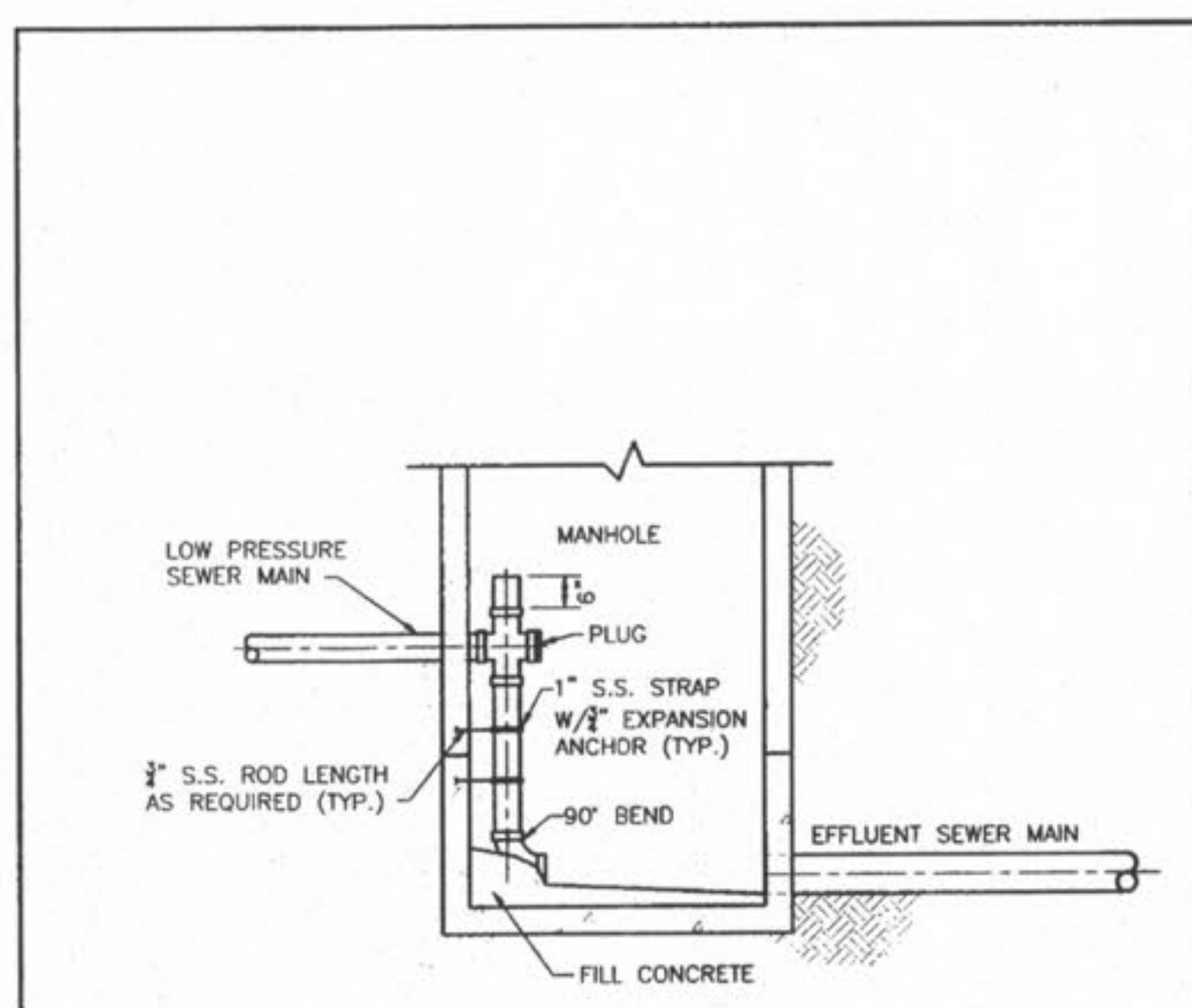
Duckett Creek Sanitary District

TYPICAL SANITARY SEWER LATERAL PROFILE	Des By: BSM	App By: KLA	Detail No. 26
	Chd By: MDOB	Date: 1-9-01	



Duckett Creek Sanitary District

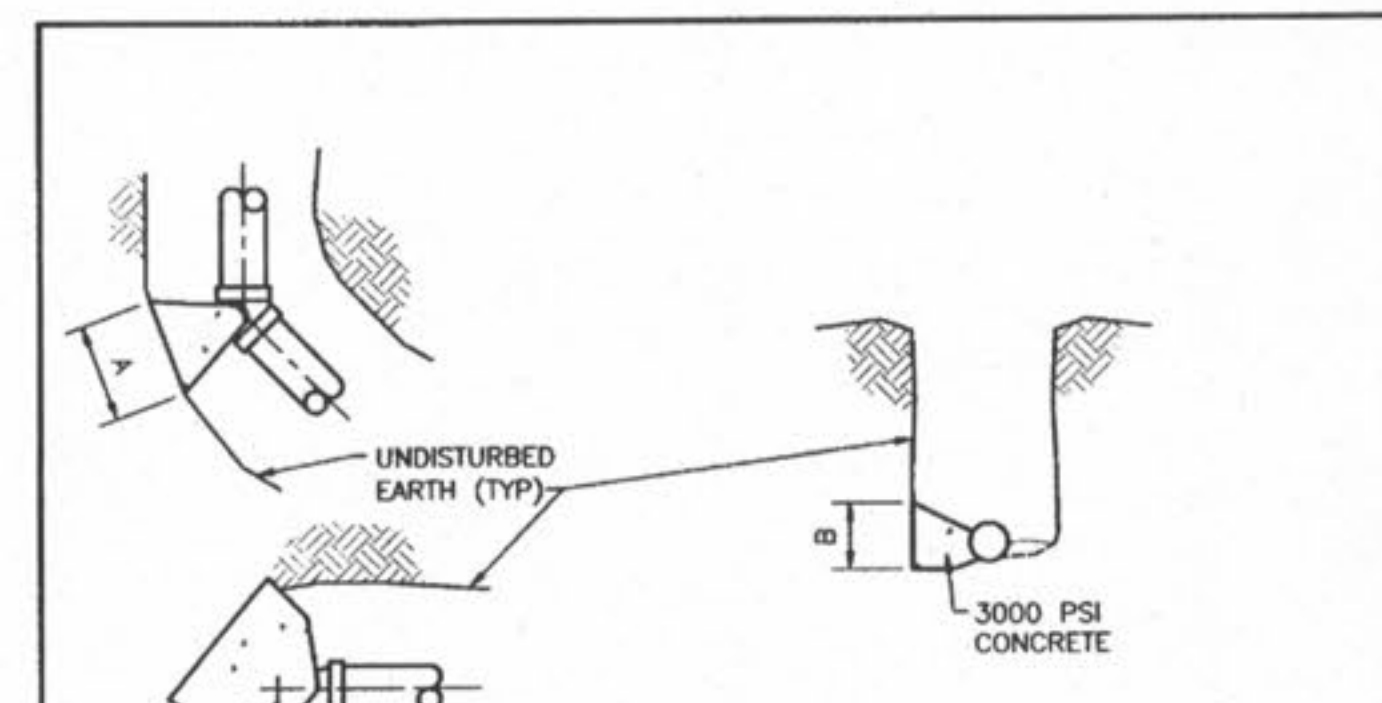
SANITARY SEWER LATERAL RISER DETAIL	Des By: BSM	App By: KLA	Detail No. 27
	Chd By: MDOB	Date: 1-9-01	



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
	Chd 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
	Chd By: MDOB	Date: 1-9-01	

REVISIONS

DATE	BY	REASON
7/17/08	JKW	OWNER COMMENTS
7/17/08	JKW	CITY COMMENTS

DEVELOPER/OWNER:
THE JONES COMPANY HOMES, L.L.C.
 16640 CHESTERFIELD GROVE, SUITE 200
 CHESTERFIELD, MO 63005
 PHONE: (636) 537-7192



PRESTON WOODS - PHASE 4
 IMPROVEMENT PLANS
 PRESTON WOODS LANE
 O'FALLON, MO. 63366
SANITARY SEWER DETAILS

planning • engineering • surveying • landscape architecture
Cole and Associates
 INCORPORATED
 10777 sunset office dr.
 saint louis, missouri 63127
 p. 314 964 9687 f. 314 964 0567

DESIGNED BY: JKW
 DRAWN BY: JKW
 CHECKED BY: JFH
 DATE: 4/9/08

Job Number: 08-0033
 Sheet Number: C9.4

NOTE: THE DETAILS SHOWN HEREIN ARE FOR THE PURPOSE OF PRIVATE CONSTRUCTION ONLY. PUBLIC CONSTRUCTION WILL REQUIRE STRICT ADHERENCE TO THE DETAILS PUBLISHED BY DUCKETT CREEK AND ST. CHARLES COUNTY.