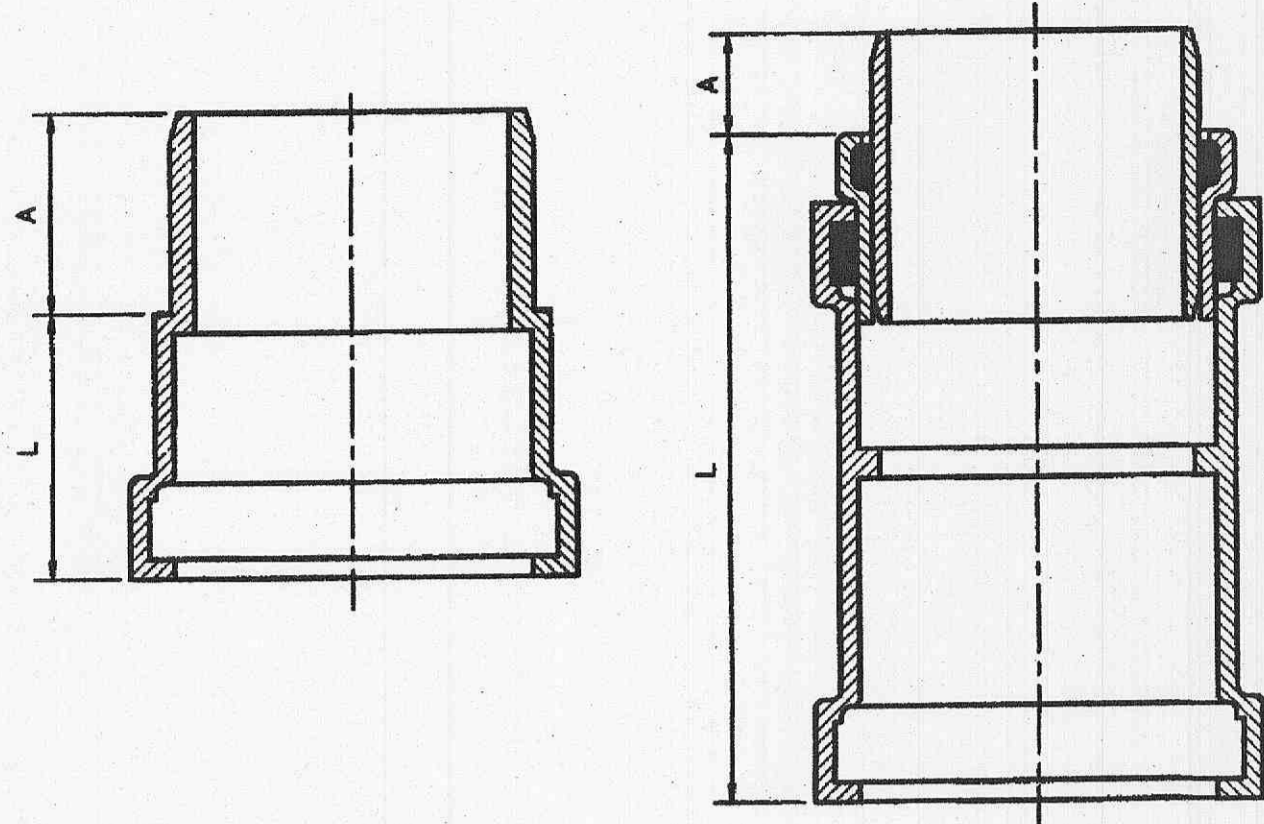


| SIZE | CATALOG NO. | A | B | C | D | E | F | G | H | CT | PT |
|------|-------------|------|------|------|------|------|------|------|-----|-----|-----|
| 4" | 334-040 | 4.56 | 8.23 | 4.25 | 4.10 | 3.94 | 4.80 | 2.72 | 2.7 | .32 | .25 |
| 6" | 334-060 | 6.68 | 9.93 | 6.31 | 4.57 | 5.88 | 6.90 | 3.72 | 3.5 | .45 | .36 |

Duckett Creek Sanitary District

SDR-35 x C900 BELL AND SPIGOT ADAPTERS
 Dim By: BSM App By: KLA Detail No. 19A
 Cld By: MDOB Date: 1-3-01

SDR-35 x C900 BELL & SPIGOT ADAPTERS



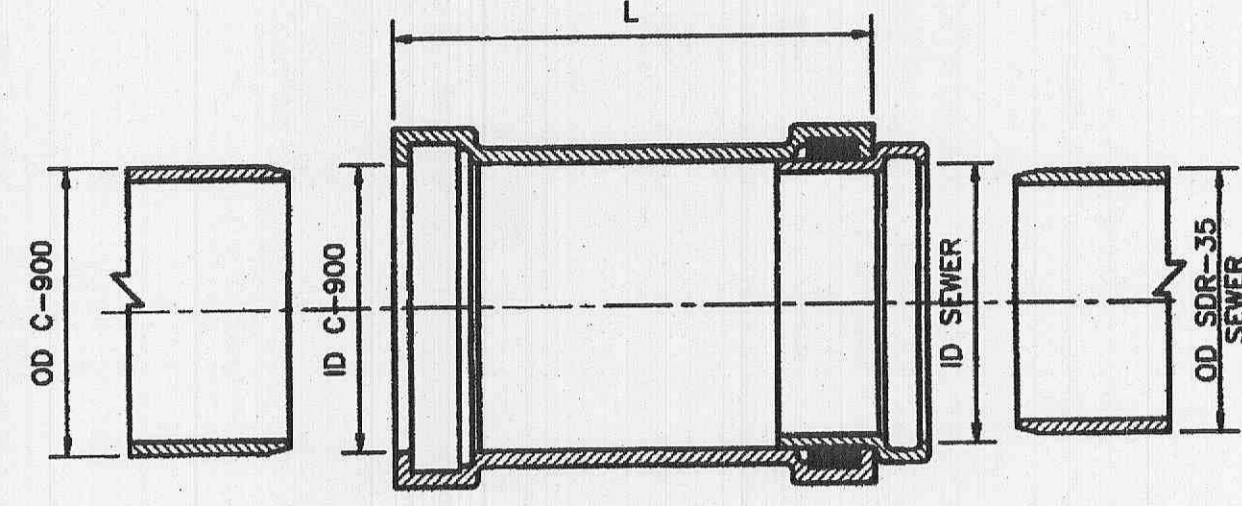
HARCO STYLE FABRICATED STYLE

| SIZE | CATALOG NO. | A | L | STYLE |
|------|-------------|-----|------|------------|
| 4" | 335-040 | 3.2 | 10.0 | FABRICATED |
| 6" | 335-060 | 2.9 | 3.5 | HARCO |
| 8" | 335-080 | 4.0 | 12.5 | FABRICATED |

Duckett Creek Sanitary District

SDR-35 x C900 BELL AND SPIGOT SPECIAL 4", 6" & 8" ADAPTERS
 Dim By: BSM App By: KLA Detail No. 19B
 Cld By: MDOB Date: 1-3-01

SDR-35 x C900 BELL & BELL ADAPTERS

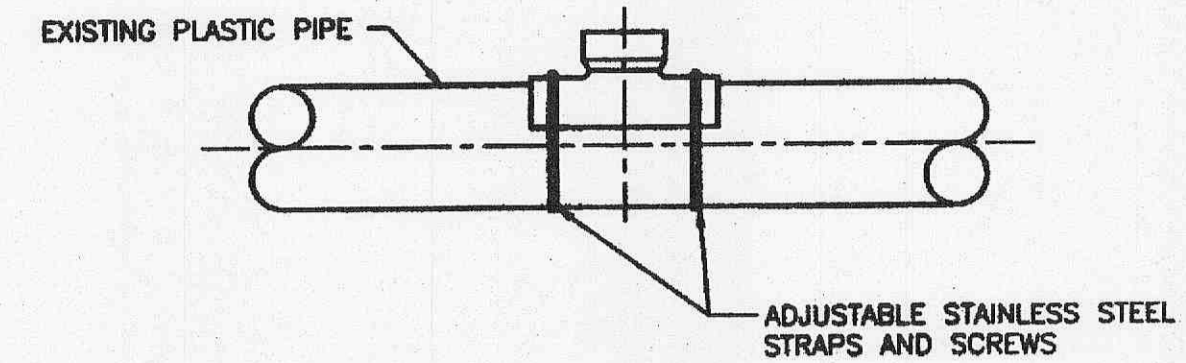


| SIZE | CATALOG NO. | OD C900 | OD C900 | ID C900 | ID SEWER | L | CTN QTY | CTN WT |
|------|-------------|---------|---------|---------|----------|-------|---------|--------|
| 4x4 | 337-040 | 4.80 | 4.215 | 4.86 | 4.25 | 10.0 | 1 | 4 |
| 6x6 | 337-060 | 6.90 | 6.275 | 6.96 | 6.32 | 11.13 | 1 | 8 |
| 8x8 | 337-080 | 9.05 | 8.400 | 9.13 | 8.45 | 12.50 | 1 | 15 |

Duckett Creek Sanitary District

SDR-35 x C900 BELL AND BELL 4", 6" & 8" ADAPTERS
 Dim By: BSM App By: KLA Detail No. 19C
 Cld By: MDOB Date: 1-3-01

PLASTIC SADDLE TEE OR WYE FITTING (SOLVENT WELD)

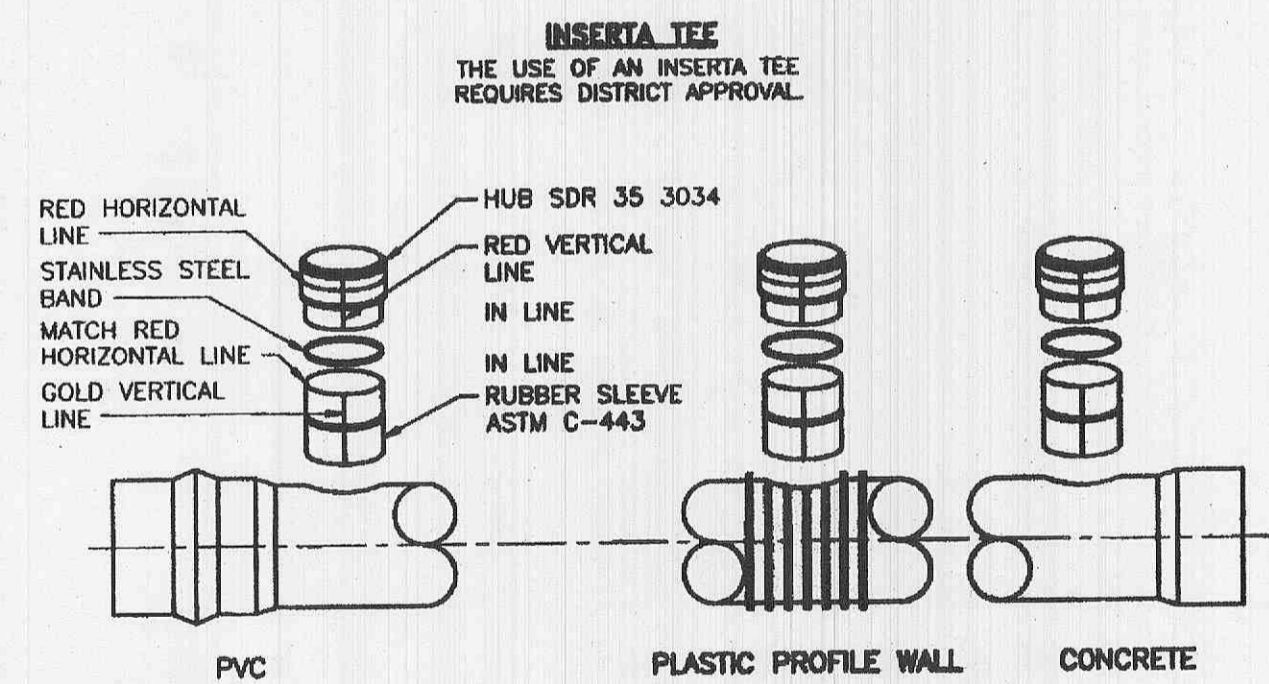


WHEN CONNECTION TO A PLASTIC PIPE IS ALLOWED AND A CONNECTION IS LARGER THAN 6" IN DIAMETER, A SOLVENT WELD WYE OR TEE FITTING OF A SIMILAR MATERIAL MUST BE USED. (EXAMPLE: 10" x 8") THIS IS ACCOMPLISHED BY CAREFULLY CUTTING A HOLE WITH A SAW IN THE MAIN AT THE REQUIRED LOCATION AFTER CUTTING AND SHAPING THE HOLE TO THE SIZE OF THE FITTING. THE FOLLOWING STEPS SHOULD BE TAKEN.

- CLEAN AND DRY BOTH INSIDE THE SADDLE WYE SURFACE AND PIPE SURFACE TO BE SOLVENT CEMENTED.
- IMPORTANT: APPLY A LIBERAL HEAVY COAT OF ONE-STEP SOLVENT CEMENT TO THE INSIDE SURFACE OF THE SADDLE WYE AND TO THE EXTERIOR WELDING SURFACE TO THE PIPE.
- WITHOUT DELAY, MATE THE SURFACES AND STRAP DOWN TIGHTLY. A BEAD OF SOLVENT SHOULD APPEAR AFTER THE SADDLE HAS BEEN STRAPPED DOWN TIGHTLY.
- USING A RAG OR PAPER TOWEL, WIPE BEAD AND ANY EXCESS SOLVENT CEMENT OFF PIPE AND SADDLE.
- ALLOW 30-60 MINUTES FOR SET-UP TIME BEFORE BACKFILLING. CURE TIME DEPENDS ON SIZE FIT OF MATERIALS BEING INSTALLED AND VARIOUS COLD DAMP CONDITIONS.
- DISCARD OLD SOLVENT IF IT BECAME JELLED OR LUMPY.
- A CLEAN, DRY BEDDING MATERIAL IS REQUIRED AROUND THE COMPLETED CONNECTION BEFORE BACKFILLING. THE BEDDING MATERIAL SHOULD BE ONE OF THE FOLLOWING:
 - 1 TO 3 CEMENT TO SAND MIX
 - "PRE-MIX" CONCRETE
 - DCSD APPROVED BEDDING FOR SANITARY SEWERS.

Duckett Creek Sanitary District

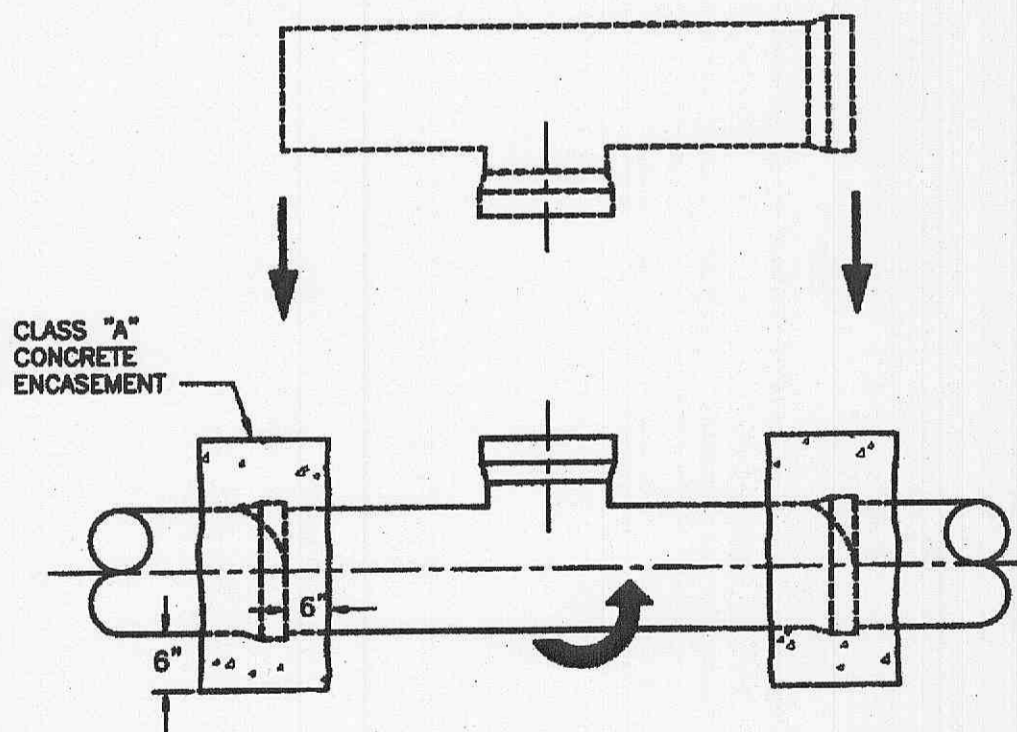
8" & LARGER CONNECTION TO PLASTIC MAIN
 Dim By: BSM App By: KLA Detail No. 20A
 Cld By: MDOB Date: 1-4-01



- INSTALLATION PROCEDURE:**
- CORE THE PROPER SIZE HOLE.
 - INSERT THE RUBBER SLEEVE (1) IN THE CORED HOLE WITH THE GOLD VERTICAL LINE ON THE RUBBER SLEEVE (2) FACING TO THE SIDE OF THE MAIN LINE. THE UPPER SEGMENT SHOULD BE ON TOP OF THE WALL OR RIS AND THE LOWER SEGMENT (PVC, PROFILE WALL, AND POLYETHYLENE PIPE ONLY) SHOULD BE ON THE INSIDE OF THE PIPE.
 - APPLY THE INSERTA TEE SOLUTION SUPPLIED TO THE INSIDE OF THE RUBBER SLEEVE AND TO THE OUTSIDE OF THE PVC HUB ADAPTER. CAUTION - DO NOT USE AN OIL BASED LUBRICANT.
 - PLACE THE PVC HUB ADAPTER (3) INTO THE RUBBER SLEEVE. MAKE SURE THAT THE RED VERTICAL LINE (4) ON THE PVC HUB ADAPTER IS IN LINE WITH THE GOLD VERTICAL LINE (5) ON THE RUBBER SLEEVE.
 - PLACE THE 2x4 BOARD ON TOP OF THE PVC HUB ADAPTER.
 - THE RED HORIZONTAL LINE (6) AT THE TOP OF THE HUB ADAPTER IS A DEPTH MARK. THIS TELLS THE INSTALLER HOW FAR TO DRIVE THE ADAPTER INTO THE RUBBER SLEEVE. DRIVE THE PVC HUB ADAPTER INTO THE RUBBER SLEEVE TO WHERE THE HORIZONTAL RED LINE (6) ON THE PVC HUB ADAPTER (3) MEETS THE TOP OF THE RUBBER SLEEVE (5).
 - PLACE THE STAINLESS STEEL BAND (7) AROUND THE TOP OF THE RUBBER SLEEVE AND TIGHTEN DOWN.
 - INSTALL PIPE IN NORMAL MANNER.

Duckett Creek Sanitary District

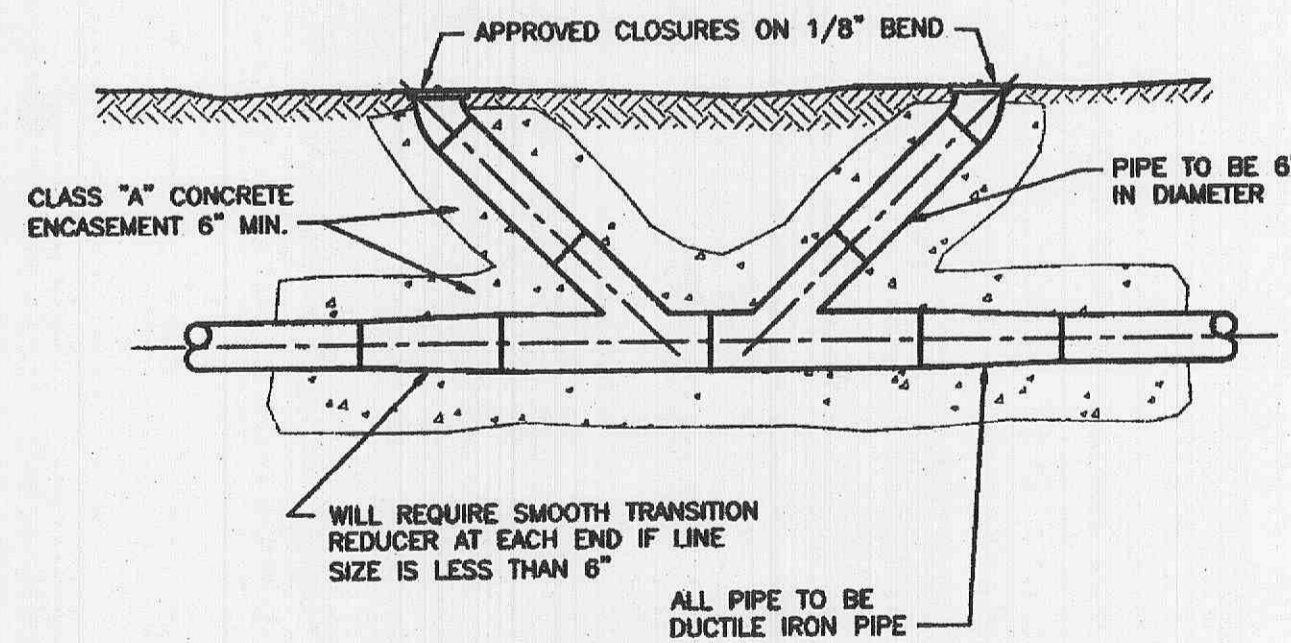
INSERTA TEE DETAILS AND SPECIFICATIONS
 Dim By: BSM App By: KLA Detail No. 20B
 Cld By: MDOB Date: 1-4-01



- NOTES:**
- WHEN A CONNECTION IS ALLOWED LARGER THAN 6" DIAMETER A SADDLE MAY BE USED IF THE I.D. OF THE CONNECTION PIPE IS NOT GREATER THAN ONE HALF (1/2) OF THE I.D. OF THE MAIN SEWER. (EXAMPLE: 24" x 10")
 - IF THE I.D. OF THE CONNECTION PIPE IS GREATER THAN ONE HALF (1/2) OF THE I.D. OF THE MAIN SEWER THE CONNECTION PIPE MUST BE "ROLLED IN". (EXAMPLE: 15" x 8")
 - THIS IS ACCOMPLISHED BY BREAKING AWAY AND REMOVING ONE SECTION OF PIPE. THE TOP HALF OF THE BELL ON THE PIPE LYING ADJACENT TO THE GAP IS CAREFULLY BROKEN OFF. THE TOP HALF OF THE BELL ON THE MAIN REPLACEMENT SECTION (WITH A "TEE" WYE) FITTING IS ALSO BROKEN OFF. THE REPLACEMENT PIPE IS THEN PLACED IN THE LINE GAP WITH THE STUB POINTED IN THE WRONG DIRECTION. THE BROKEN BELLS ON THE REPLACEMENT AND ADJOINING PIPE MAKE IT POSSIBLE FOR THE REPLACEMENT SECTION TO FIT INTO THE SEWER LINE WITHOUT DISTURBING THE ADJOINING PIPE SECTIONS. THE REPLACEMENT SECTION IS THEN ROTATED TO THE DESIRED POSITION AND THE BROKEN BELLS ARE ENCASED WITH A 6" CLASS "A" CONCRETE ENCASEMENT.
 - I.D. OF MAIN SEWER SHALL NOT BE DECREASED BY A ROLL-IN CONNECTION.

Duckett Creek Sanitary District

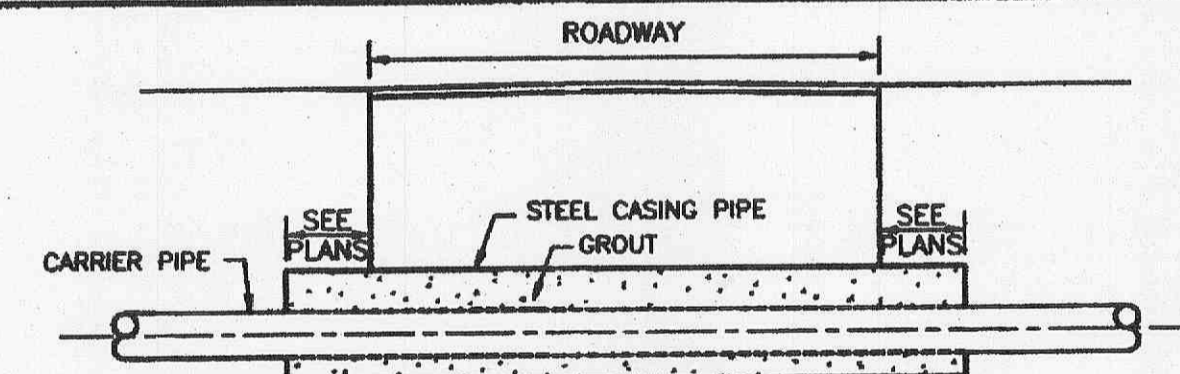
"ROLL-IN" (FOR EXISTING CLAY OR CONCRETE PIPE)
 Dim By: BSM App By: KLA Detail No. 21
 Cld By: MDOB Date: 1-5-01



180' MAXIMUM SPACING

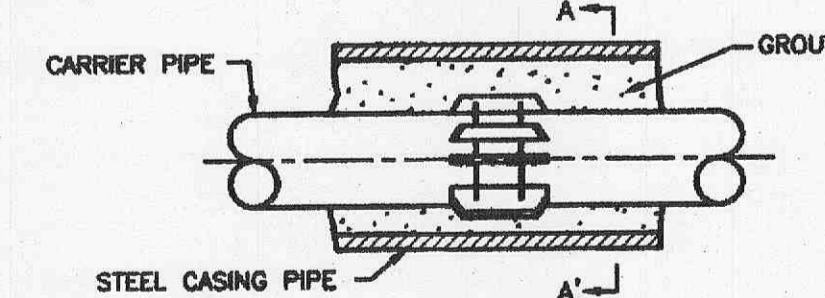
Duckett Creek Sanitary District

FORCE MAIN CLEANOUT (6" DIA. & SMALLER)
 Dim By: BSM App By: KLA Detail No. 22
 Cld By: MDOB Date: 1-5-01

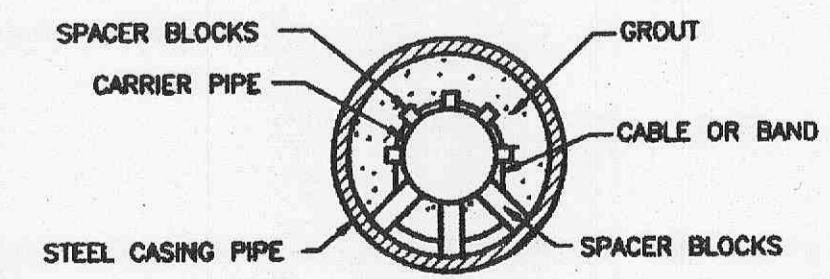


BORING DETAIL

- NOTES:**
- INSIDE DIAMETER OF CASING PIPE TO BE MINIMUM OF 4" GREATER THAN COUPLING DIAMETER OF CARRIER PIPE.
 - ENCASEMENTS TO BE INSTALLED UNDER THE ROAD BY MEANS OF JACKING IT THROUGH, OR BY DRY BORING A HOLE THAT WILL RECEIVE THE CASING WITH A SNUG FIT.
 - THE OUTSIDE DIAMETER OF THE CASING SHALL NOT BE LESS THAN, NOR MORE THAN ONE INCH GREATER THAN THE BORED HOLE.
 - THE ANNULAR SPACE BETWEEN THE CASING PIPE AND THE BORED HOLE SHALL BE FILLED WITH GROUT.



SUPPORT OF CARRIER PIPE OR FORCE MAIN IN CASING



SECTION A-A'

Duckett Creek Sanitary District

ROADWAY BORING DETAIL
 Dim By: BSM App By: KLA Detail No. 23
 Cld By: MDOB Date: 1-5-01

LAYOUT: SANITARY 10.3 DATE: 07/25/2008 11:08AM DRAWING: S:\085\0850207\07-0075\07-0075\0850207\IMPROVEMENT PLANS\010.D\DETAILS_07-075.dwg

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|------------|--------------------------------------|
| 1 | 07/13/2008 | CITY OF FALLON/FNSD #2/DCSD COMMENTS |
| 2 | 07/14/2008 | CITY OF FALLON/FNSD #2/DCSD COMMENTS |
| 3 | 07/17/2008 | CITY OF FALLON/FNSD #2/DCSD COMMENTS |
| 4 | 07/17/2008 | CITY OF FALLON/FNSD #2/DCSD COMMENTS |

DEVELOPER/OWNER: THE VILLAGE AT PARK PLACE, LLC.
 7001 BOARDWALK SPRINGS PL
 OF FALLON, MO 63366
 PHONE: (636) 561-9323

SEAL: PROFESSIONAL ENGINEER MATTHEW R. MOSEBACHER, No. 000702888, State of Missouri, PE-000702888

PLANNING AND DEVELOPMENT DEPARTMENT FILE #9831.57 (AREA PLAN-APPROVED MAY 24TH, ORDINANCE #5178) - 9831.57.01 (FINAL PLAN)

PARK AVENUE VILLAGE IMPROVEMENT PLANS
 PHOENIX PARKWAY
 OF FALLON, MO

Gole and Associates INCORPORATED
 planning • engineering • surveying • landscape architecture
 10777 sunset office drive
 saint louis, missouri 63176
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DESIGNED BY: CJB
 DRAWN BY: KDK
 CHECKED BY: JFH
 DATE: 11/6/07
 Job Number: 07-075
 Sheet Number: C10.3

SANITARY SEWER DETAILS