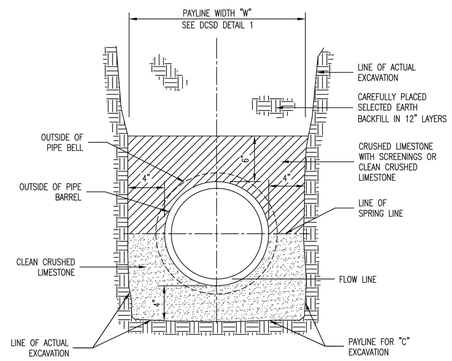
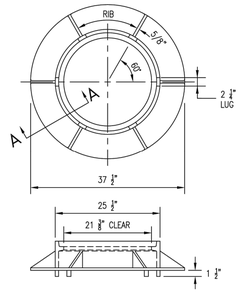


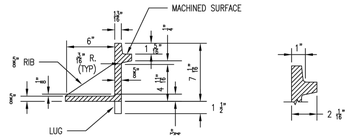
NOTES:
ALL PVC SANITARY SEWER PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3034 STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE SEWER PIPE, SDR-35 OR EQUAL, WITH "CLEAN" 1/2 INCH TO 1 INCH GRANULAR STONE BEDDING UNIFORMLY GRADED. THIS BEDDING SHALL EXTEND FROM 4 INCHES BELOW THE PIPE TO SPRINGLINE OF PIPE. IMMEDIATE BACKFILL OVER PIPE SHALL CONSIST OF SAME SIZE "CLEAN" OR "MINUS" STONE FROM SPRINGLINE OF PIPE TO 6 INCHES ABOVE THE TOP OF PIPE. FINAL BACKFILL MATERIAL SHALL BE OF SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT AS OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE ROCKS OR STONES, OR OTHER UNSTABLE MATERIALS SHALL NOT BE USED WITHIN 2 FEET FROM TOP OF PIPE.

Duckett Creek Sanitary District

Duckett Creek Sanitary District			
PIPE BEDDING CLASS "C" (FOR ALL EXCEPT REINFORCED CONCRETE PIPE)	Dwn By: BSM / Ckd By: MDOB	App By: KA / Date: JULY 2016	Detail No. 3



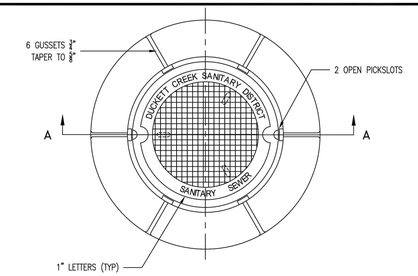
CAST IRON MANHOLE FRAME

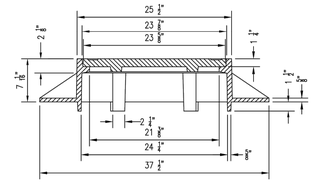


SECTION A–A
(230 lbs)

Duckett Creek Sanitary District

Duckett Creek Sanitary District			
CAST IRON MANHOLE FRAME	Dwn By: BSM / Ckd By: MDOB	App By: KLA / Date: DEC. 2015	Detail No. 11

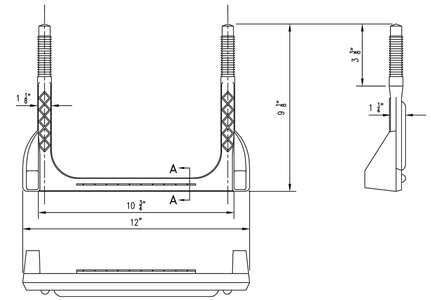


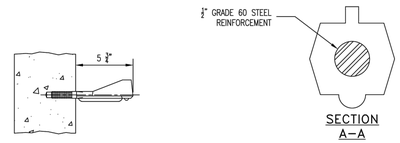


SECTION A–A

Duckett Creek Sanitary District

Duckett Creek Sanitary District			
MANHOLE FRAME AND COVER	Dwn By: BSM / Ckd By: MDOB	App By: KLA / Date: DEC. 2015	Detail No. 12



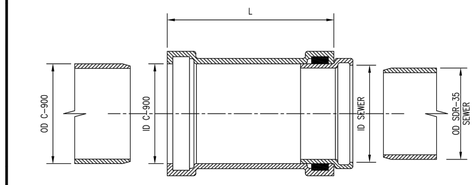


SECTION A–A

COPOLYMER POLYPROPYLENE PLASTIC

Duckett Creek Sanitary District

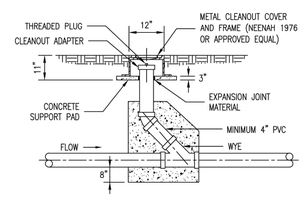
Duckett Creek Sanitary District			
MANHOLE STEP FOR PRECAST MANHOLE	Dwn By: BSM / Ckd By: MDOB	App By: KA / Date: DEC. 2015	Detail No. 18



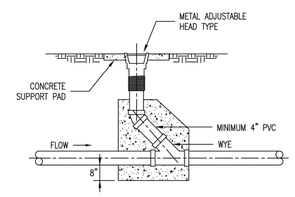
SIZE	CATALOG NO.	OD C900	OD SEWER	ID C900	ID SEWER	L	CTN QTY	CTN WT
4x4	337-040	4.80	4.215	4.86	4.25	10.0	1	4
6x6	337-060	6.90	6.275	6.96	6.32	11.13	1	8
8x8	337-080	9.05	8.400	9.13	8.45	12.50	1	15

Duckett Creek Sanitary District

Duckett Creek Sanitary District			
SDR-5 x C900 BELL AND BELL 4", 6" & 8" ADAPTORS	Dwn By: BSM / Ckd By: MDOB	App By: KA / Date: DEC. 2015	Detail No. 19C



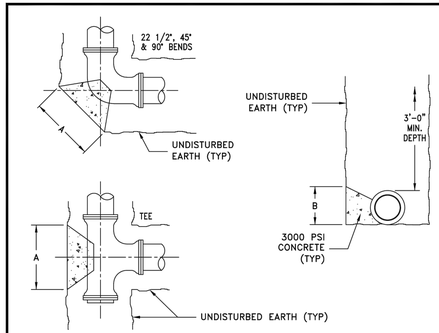
METAL FRAME AND COVER TYPE CLEANOUT



ADJUSTABLE HEAD TYPE CLEANOUT

Duckett Creek Sanitary District

Duckett Creek Sanitary District			
TYPICAL SEWER LATERAL CLEANOUT DETAIL	Dwn By: BSM / Ckd By: MDOB	App By: KLA / Date: DEC. 2015	Detail No. 25



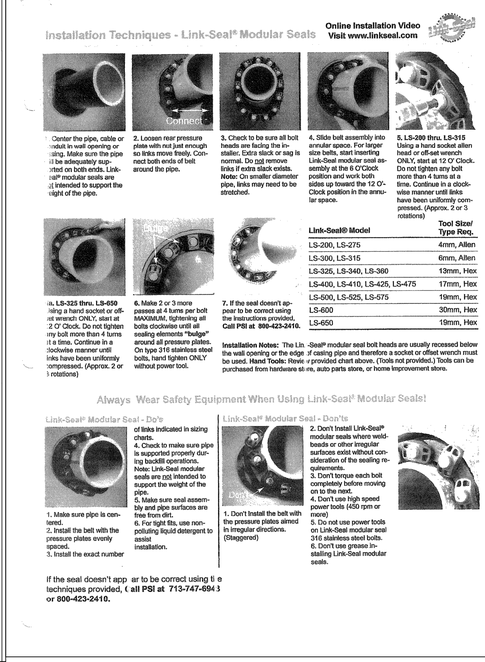
LPSS COLLECTOR MAIN PVC SDR 21 SIZE MIN. 2" I.D., THRUST BLOCK SIZE TO BE DETERMINED BY ENGINEER .

NOTES:
1. ALL A & B DIMENSIONS TO BE AS REQUIRED TO REACH UNDISTURBED EARTH BUT NOT LESS THAN LISTED ON THRUST BLOCK TABLE.
2. DIMENSIONS A & B APPLY TO ALL BEND CONDITIONS SHOWN.
3. INSTALL PLUGS AT ALL RUNS OR BRANCHES DISCONTINUED FOR FUTURE SERVICES.
4. ALL BENDS, TEES, PLUGS, FITTINGS OR OTHER SIGNIFICANT CHANGES SHALL BE BRACED WITH POURED CONCRETE THRUST BLOCK AS SHOWN ON THIS DETAIL.
5. ALL PLUGS SHALL BE SEPARATED FROM THE CONCRETE THRUST BLOCK BY A 5 MIL LAYER OF PLASTIC SHEETING.

MAIN SIZE	A x B 22½°	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

Duckett Creek Sanitary District			
THRUST BLOCK DETAIL AND SIZE SCHEDULE	Dwn By: BSM / Ckd By: MDOB	App By: KA / Date: DEC. 2015	Detail No. 29


Installation Techniques - Link-Seal® Modular Seals

Online Installation Video
Visit www.linkseal.com

1. Center the pipe, cable or conduit in wall opening or casing. Make sure the pipe is adequately supported on both ends. Link-Seal® modular seals are not intended to support the weight of the pipe.

2. Loosen rear pressure plate with nut just enough so links move freely. Connect both ends of belt around the pipe.

3. Check to be sure all bolt heads are facing the installer. Extra slack or sag is normal. Do not remove links if extra slack exists. Note: On smaller diameter pipe, links may need to be stretched.

4. Slide belt assembly into annular space. For larger size belts, start inserting Link-Seal modular seal assembly at the 6 O'Clock position and work both sides up toward the 12 O'Clock position in the annular space.

5. LS-200 thru. LS-315 Using a hand socket allen head or off-set wrench ONLY, start at 12 O' Clock. Do not tighten any bolt more than 4 turns at a time. Continue in a clockwise manner until links have been uniformly compressed. (Approx. 2 or 3 rotations)

Link-Seal® Model	Tool Size/ Type Req.
LS-200, LS-275	4mm, Allen
LS-300, LS-315	6mm, Allen
LS-325, LS-340, LS-360	13mm, Hex
LS-400, LS-410, LS-425, LS-475	17mm, Hex
LS-500, LS-525, LS-575	19mm, Hex
LS-600	30mm, Hex
LS-650	19mm, Hex

6. LS-325 thru. LS-650 Using a hand socket or off-set wrench ONLY, start at 12 O' Clock. Do not tighten any bolt more than 4 turns at a time. Continue in a clockwise manner until links have been uniformly compressed. (Approx. 2 or 3 rotations)

6. Make 2 or 3 more passes at 4 turns per bolt MAXIMUM, tightening all bolts clockwise until all sealing elements "bulge" around all pressure plates. On type 316 stainless steel bolts, hand tighten ONLY without power tool.

7. If the seal doesn't appear to be correct using the instructions provided, Call PSI at 800-423-2410.

Installation Notes: The Link-Seal® modular seal bolt heads are usually recessed below the wall opening or the edge of casing pipe and therefore a socket or offset wrench must be used. Hand Tools: Review provided chart above. (Tools not provided.) Tools can be purchased from hardware stores, auto parts store, or home improvement store.

Always Wear Safety Equipment When Using Link-Seal® Modular Seals!

Link-Seal® Modular Seal - Do's

1. Make sure pipe is centered.
2. Install the belt with the pressure plates evenly spaced.
3. Install the exact number of links indicated in sizing charts.
4. Check to make sure pipe is supported properly during backfill operations. Note: Link-Seal modular seals are not intended to support the weight of the pipe.
5. Make sure seal assembly and pipe surfaces are free from dirt.
6. For tight fits, use non-polluting liquid detergent to assist Installation.

Link-Seal® Modular Seal - Don'ts

1. Don't Install the belt with the pressure plates aimed in irregular directions. (Staggered)
2. Don't Install Link-Seal® modular seals where weld-beads or other irregular surfaces exist without consideration of the sealing requirements.
3. Don't torque each bolt completely before moving on to the next.
4. Don't use high speed power tools (450 rpm or more)
5. Do not use power tools on Link-Seal modular seal 316 stainless steel bolts.
6. Don't use grease installing Link-Seal modular seals.

If the seal doesn't appear to be correct using the instructions provided, call PSI at 713-747-6943 or 800-423-2410.

UTILITY DETAILS

REVISIONS	BY

PLANS PREPARED BY:
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864-233-5497

STATE OF MISSOURI
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NUMBER
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PROFESSIONAL ENGINEER
04/23/2021

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O'FALLON, MO 63368
CROSS DEVELOPMENT CO O'FALLON, LLC.
4338 MARSH RIDGE RAOD
CARROLLTON, TX 75010
TEL: (214) 614-8252

DRAWN	BAC
CHECKED	TMB
DATE	03/19/2021
SCALE	
DRAWING	24