

# CITY OF LATHROP

Department of Public Works

## *DESIGN & CONSTRUCTION*

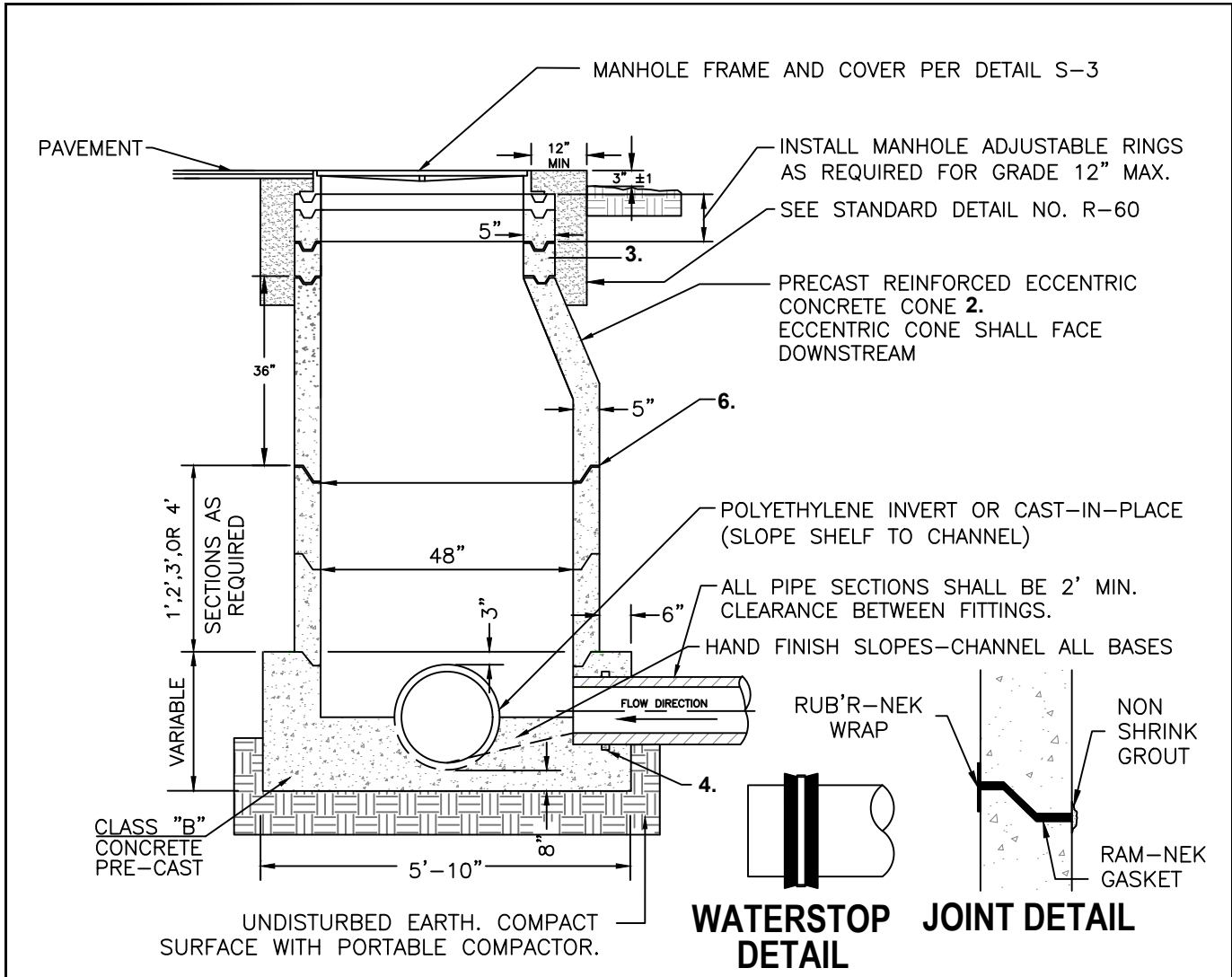
### *Standard Details*



July 2024

**Sewer**

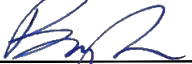
Sanitary Sewer Type I Manhole	S-1
Sanitary Sewer Inside Drop Manhole	S-2
Manhole Frame And Cover	S-3
Lamp Hole	S-4
Lamp Hole Cleanout	S-5
Property Line Cleanout	S-6
Sewage Air Release Valve	S-7
Composite Manhole Cover Within 500' of Pump Station	S-8
Sanitary Sewer Lateral	S-9



**NOTES:**

1. Concentric reinforced concrete cone may be used on approval of city engineer.
2. Precast reinforced concrete manhole unit shall conform to ASTM C-478.
3. Barrel diameter of 60" required when pipe is 24" & larger or at greater than 15' in depth.
4. All manholes shall be vacuum tested in the field in accordance with section 5-7.2 D leakage of the City Standards
5. Manhole base shall be pre-cast.
6. All joints shall be set on "Ram-Nek" or approved equal. Interior and exterior joints & pick points shall be grouted. Wrap exterior joint with Rub'R-Nek external concrete joint wrap.

NOT TO SCALE

Approved by:		
		
City of Lathrop City Engineer		
No	Revised	Date

**CITY OF LATHROP**  
DEPARTMENT OF PUBLIC WORKS

**SANITARY SEWER  
TYPE I MANHOLE**

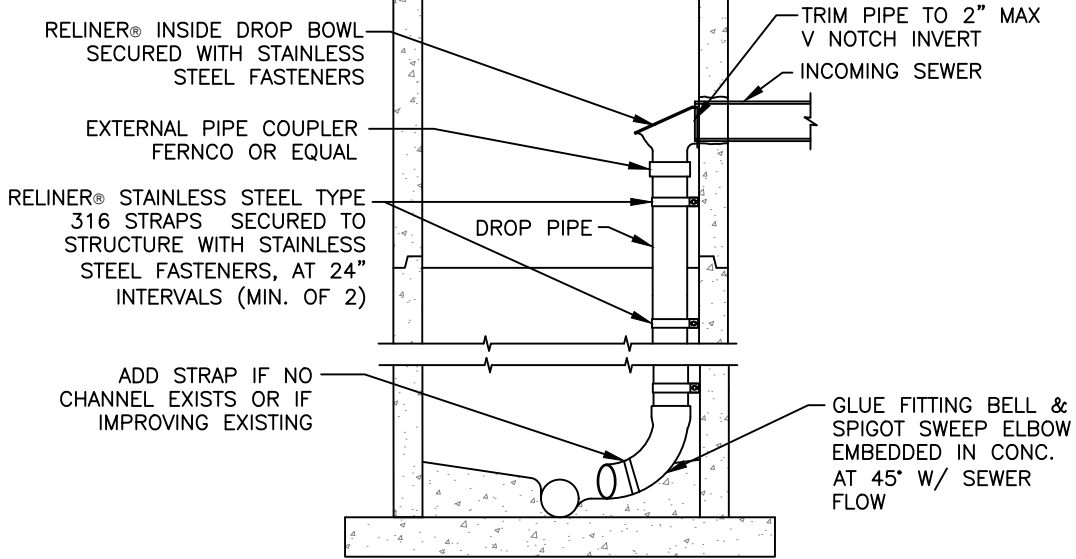
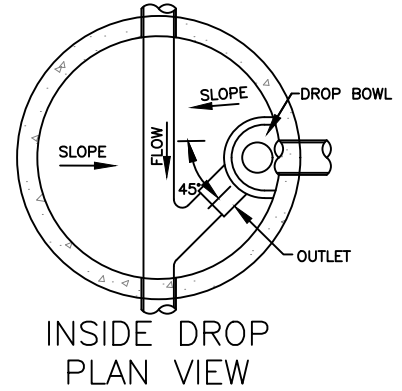
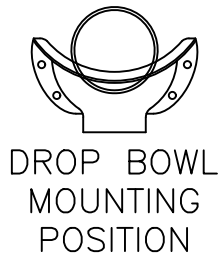


**STANDARD  
DETAIL**

Date: JULY 2024

Drawing No:

**S-1**



INSIDE DROP CONNECTION

NOTES:

1. This type of manhole shall be used where the difference in elevation between the top of outlet pipe and the invert of the feeder pipe exceeds 24".
2. All inside drop piping to be PVC SDR-26.
3. grout all joints.
4. Drop connection pipe and fittings to be same size as entering pipe.
5. Clamps to be 1-1/2" x 12 gauge stainless steel. Anchored to manhole wall with 2-1/2" stainless steel bolts 2 min at 24" o.c. (typ.).
6. Only inside drops are allowed.
7. Manhole barrel size may need to be increased to accommodate inside drop.
8. Rubber ring waterstop or manhole adapter required for PVC pipe installations.

NOT TO SCALE

Approved by:		
City of Lathrop City Engineer		
No	Revised	Date

**CITY OF LATHROP**  
DEPARTMENT OF PUBLIC WORKS

**SANITARY SEWER**  
**INSIDE DROP MANHOLE**

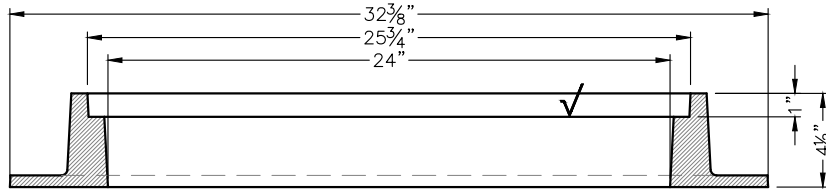
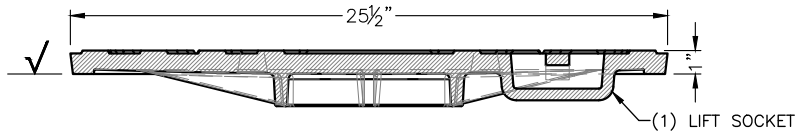
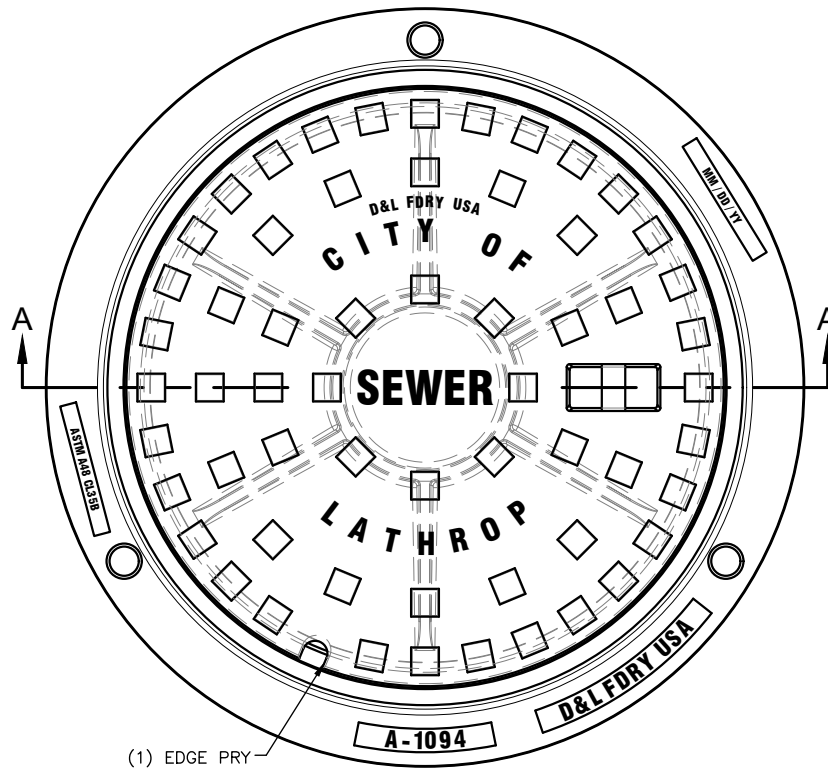


**STANDARD**  
**DETAIL**

Date: JULY 2024

Drawing No:

**S-2**



SECTION A-A

D&L SUPPLY COMPANY		
	PRODUCT NUMBER	MATERIAL TYPE
COVER	A-1094-30	GRAY IRON: ASTM A-48 CL 35B
RING	A-1094-R1	GRAY IRON: ASTM A-48 CL 35B

NOTE:

1. Manhole cover shall have raised letters and opening in socket

NOT TO SCALE

Approved by:

*[Signature]*  
 City Of Lathrop  
 City Engineer

No	Revised	Date

**CITY OF LATHROP**  
 DEPARTMENT OF PUBLIC WORKS

**MANHOLE FRAME AND COVER**

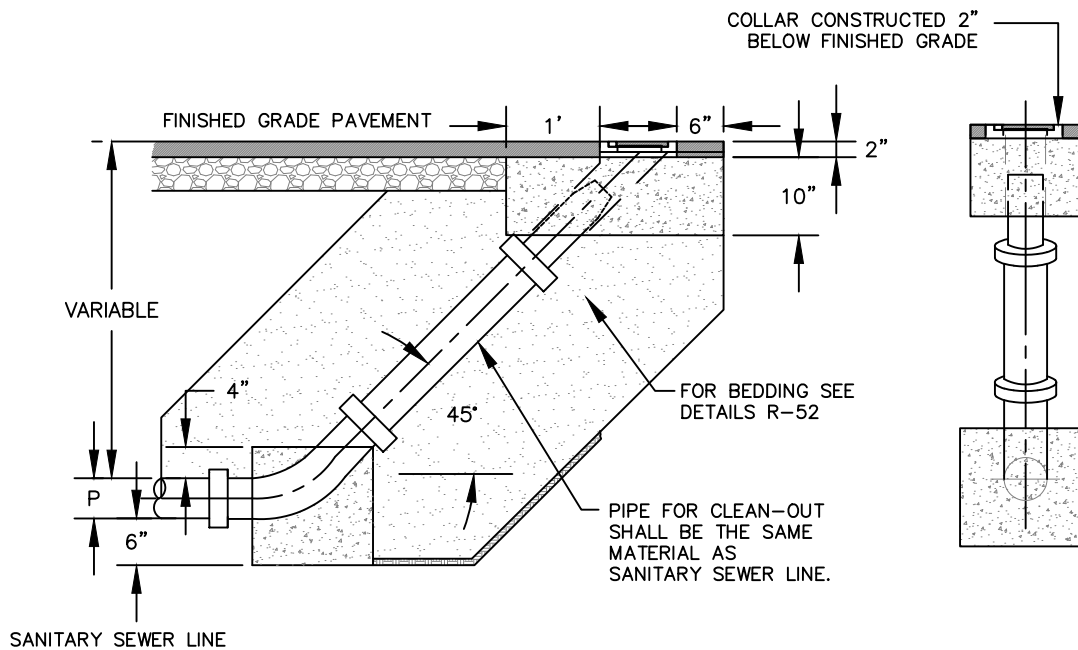
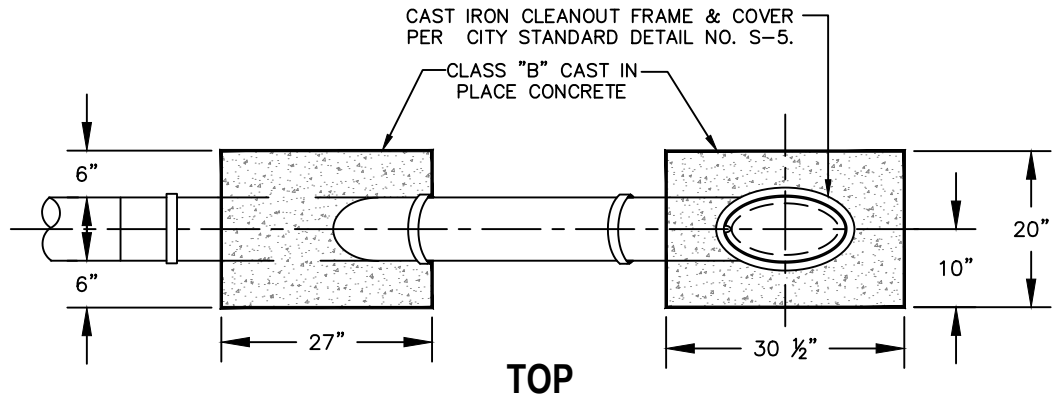


**STANDARD  
 DETAIL**

Date: JULY 2024

Drawing No:

**S-3**



**NOTES:**

1. 6"Ø 45° elbow.
2. Lamp hole shall be used at of end line or where approved by city engineer.

NOT TO SCALE

Approved by 		
City Of Lathrop City Engineer		
No	Revised	Date

**CITY OF LATHROP**  
DEPARTMENT OF PUBLIC WORKS

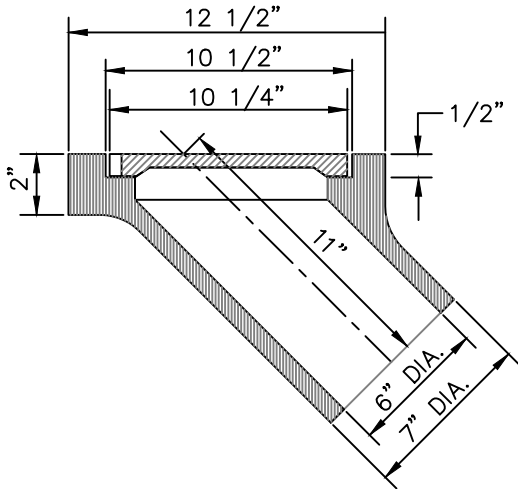
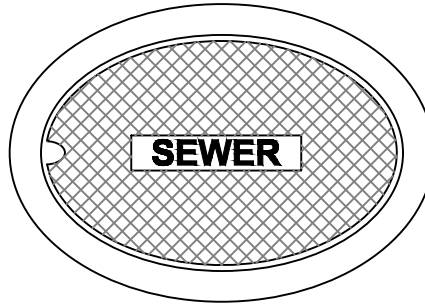
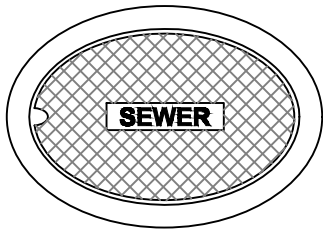
**LAMP HOLE**



**STANDARD  
DETAIL**

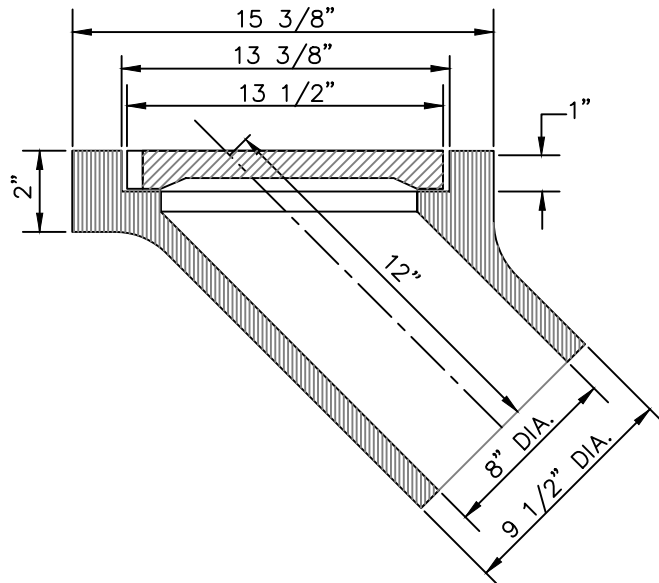
Date: JULY 2024  
Drawing No:

**S-4**



**SBF 1248 BOX / LID**

SET WEIGHT	
Frame -----	55 lbs
Lid -----	10 lbs
<b>Total</b>	<b>65 lbs</b>



**SBF 1247 BOX / LID**

SET WEIGHT	
Frame -----	65 lbs
Lid -----	20 lbs
<b>Total</b>	<b>85 lbs</b>

**NOTES:**

1. All materials used in manufacturing shall conform to ASTM 48, Class 35B.
2. Castings shall be dipped in black, bituminous paint.
3. Frame and cover meets H-20 wheel loading.

NOT TO SCALE

Approved by:		
City Of Lathrop City Engineer		
No	Revised	Date

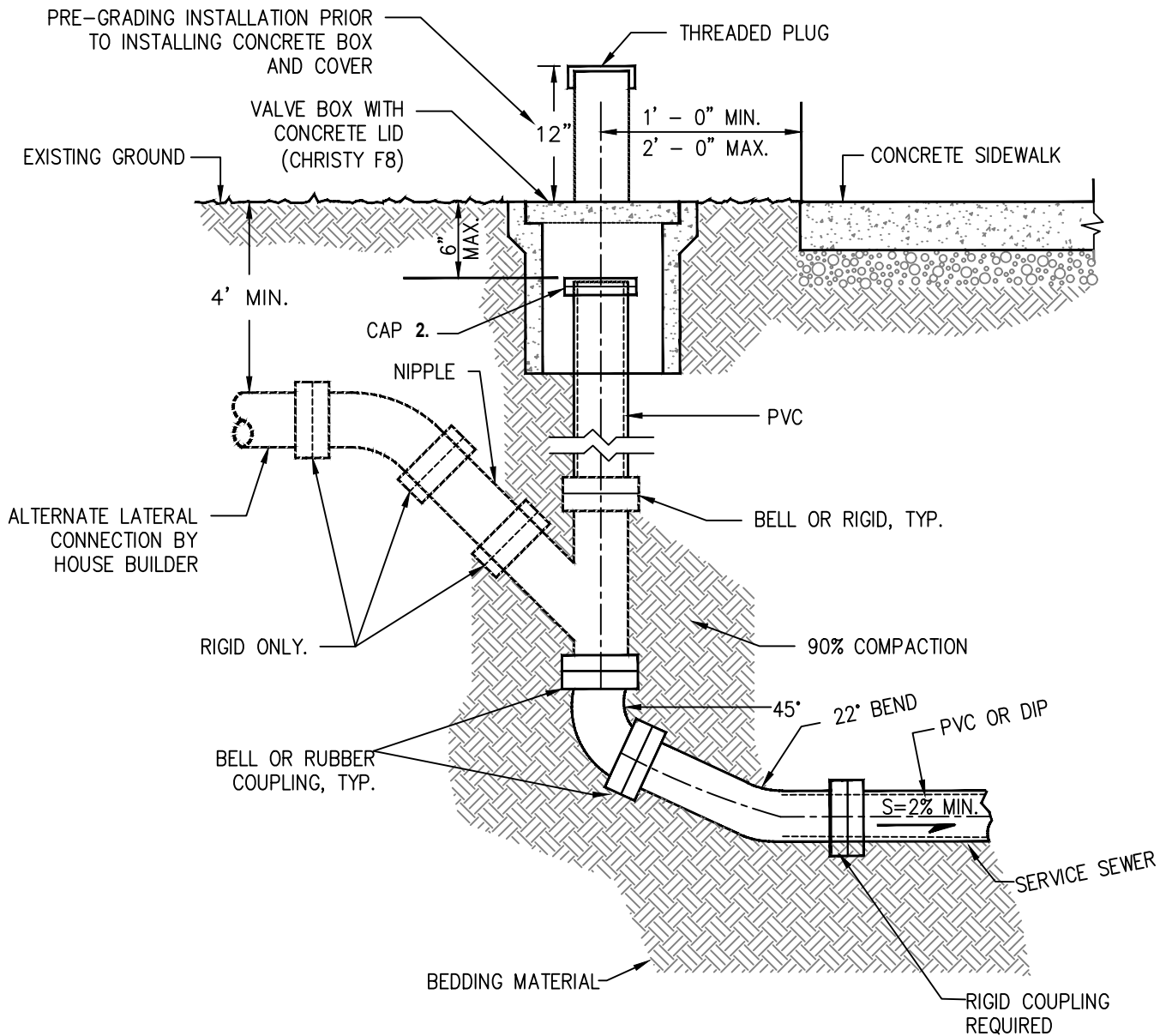
**CITY OF LATHROP**  
DEPARTMENT OF PUBLIC WORKS  
**LAMP HOLE  
CLEANOUT**



**STANDARD  
DETAIL**

Date: JULY 2024  
Drawing No:

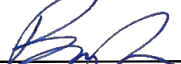
**S-5**



**NOTES:**

1. All cleanout pipe and fittings shall be same size and material as the service sewer in which they connect.
2. All caps shall be threaded plugs.
3. PVC pipe shall be SDR-26 minimum strength.

NOT TO SCALE

Approved by:		
		
City Of Lathrop City Engineer		
No	Revised	

**CITY OF LATHROP**  
DEPARTMENT OF PUBLIC WORKS

**PROPERTY LINE  
CLEANOUT**



**STANDARD  
DETAIL**

Date: JULY 2024

Drawing No:

**S-6**



**DIMENSIONS AND WEIGHTS**

NOMINAL SIZE	A	B	WEIGHT LBS.
2" THREADED	16 <sup>5</sup> / <sub>8</sub>	25 <sup>3</sup> / <sub>8</sub>	346
2" FLANGED	16 <sup>5</sup> / <sub>8</sub>	23 <sup>13</sup> / <sub>16</sub>	366
3"	16 <sup>5</sup> / <sub>8</sub>	23 <sup>13</sup> / <sub>16</sub>	407
4"	16 <sup>5</sup> / <sub>8</sub>	23 <sup>13</sup> / <sub>16</sub>	429
6"	16 <sup>5</sup> / <sub>8</sub>	24 <sup>1</sup> / <sub>64</sub>	462

**ORIFICE SIZE AREA INCH<sup>2</sup>**

AUTOMATIC ORIFICE	0.018
KINETIC ORIFICE	1.246

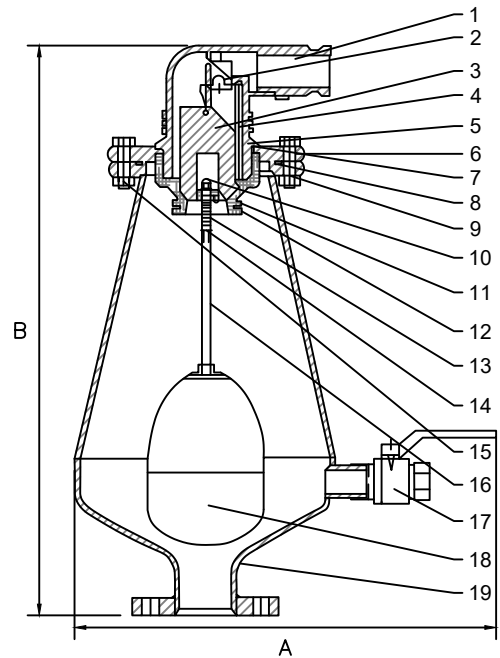
ENCLOSURE DETAILS:

1. FOR POTABLE WATER USE BLUE: PART # VCAS-1830-BL
2. FOR RECYCLED WATER USE PURPLE: PART # VCAS-1830-PR
3. FOR SEWER USE GREEN: PART #VCAS-1830-GR

THREADS: NPI  
FLANGES AVAILABLE IN ANSI STANDARD

**PARTS LIST AND SPECIFICATION**

NO.	PART	MATERIAL
1	FLUSHING CONNECTION	POLYPROPYLENE
2	STEAL PLUG ASSEMBLY	REINFORCED NYLON + RUBBER EPDM
3	FLOAT	FOAMED POLYPROPYLENE
4	CLAMPING STEM	REINFORCED NYLON
5	BODY	REINFORCED NYLON
6	COVER	STEEL DIN ST 37/ST ST SAE 316/STEEL WCB
7	O-RING	BUNA-N
8	O-RING	BUNA-N
9	WASHER	TEFLON
10	CROWN NUT	STAINLESS STEEL SAE 316
11	PLASTIC BASE	REINFORCED NYLON
12	STOPPER	ACETAL
13	SPRING	STAINLESS STEEL SAE 316
14	WASHER	STAINLESS STEEL SAE 316
15	BOLT AND NUT	STAINLESS STEEL SAE 316
16	STERN	STAINLESS STEEL SAE 316
17	BALL VALVE	BRASS ASTM A124/POLYPROPYLENE
18	FLOAT	STAINLESS STEEL SAE 316
19	BODY	STEEL DIN ST 37/ST ST SAE 316/STEEL WCB



**ONLY A.R.I. MODEL D-020 SHALL BE USED**

NOT TO SCALE

Approved by:		
City of Lathrop City Engineer		
No	Revised	Date

**CITY OF LATHROP**  
DEPARTMENT OF PUBLIC WORKS  
**SEWAGE AIR  
RELEASE VALVE**

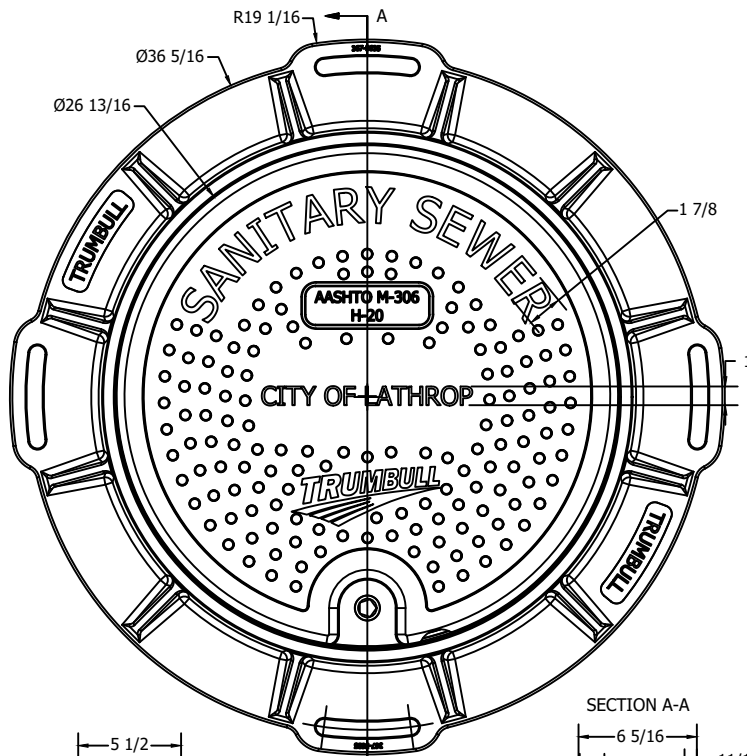


**STANDARD  
DETAIL**

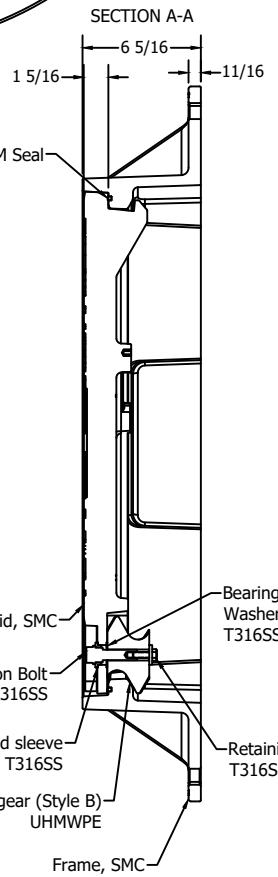
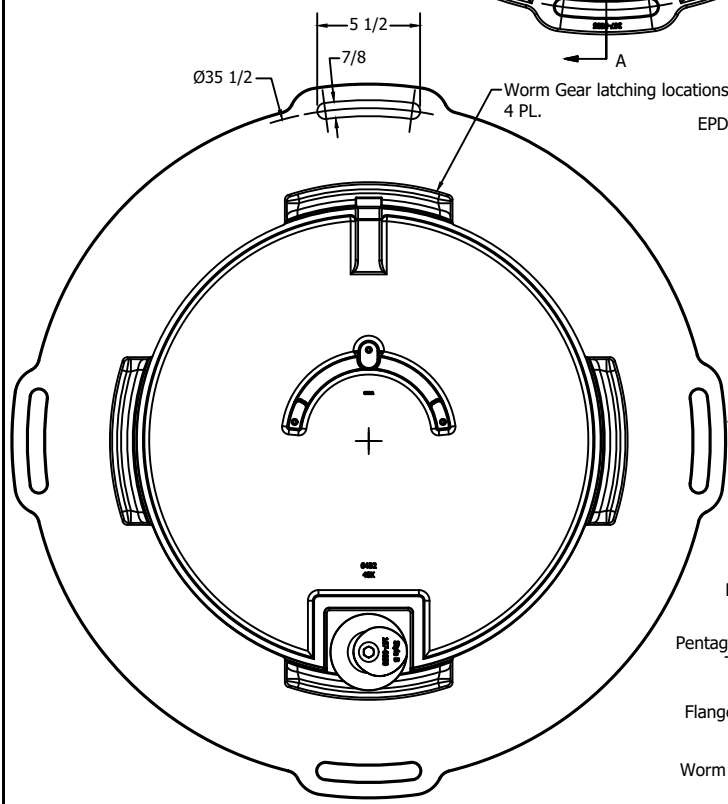
Date: JULY 2024

Drawing No:

**S-7**



Notes:  
 1.) Lid weight = 54 lb., Frame weight = 58 lbs. approx.  
 2.) Loctite (red) to be applied to threads on Retaining Bolt before final assembly.  
 3.) Units in inches



\*ALL INFORMATION SHOWN IN THIS FILE IS CONFIDENTIAL AND PROPRIETARY\*

DRAWN Demetrius		12/14/2020		<b>TRUMBULL MANUFACTURING</b>	
CHECKED QA				3850 Hendricks Rd. Youngstown, Ohio 44515 PH. 330-392-1323 FAX 330-392-1398	
PRODUCT FAMILY Meter & Sewer Lids		TITLE 25-1/2" x 1-1/4" Lid w/ Frame		REV	
PRODUCT SIZE 25-1/2" OD (40,000lb)		SCALE N.T.S.		SUBMITTAL	
Sanitary Sewer - City of Lathrop		SHEET 1 OF 1			

NOT TO SCALE

Approved by:



City of Lathrop  
City Engineer

No	Revised	Date

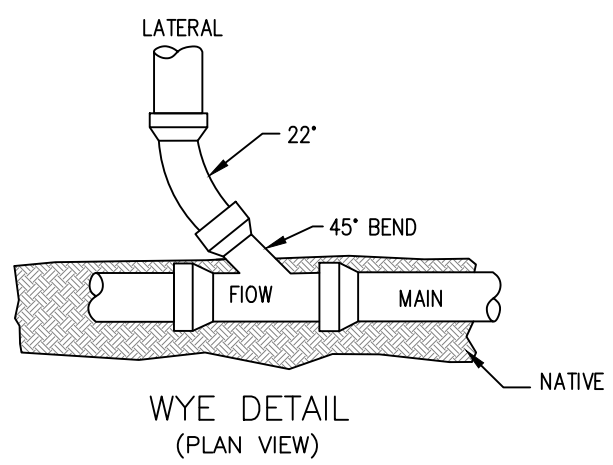
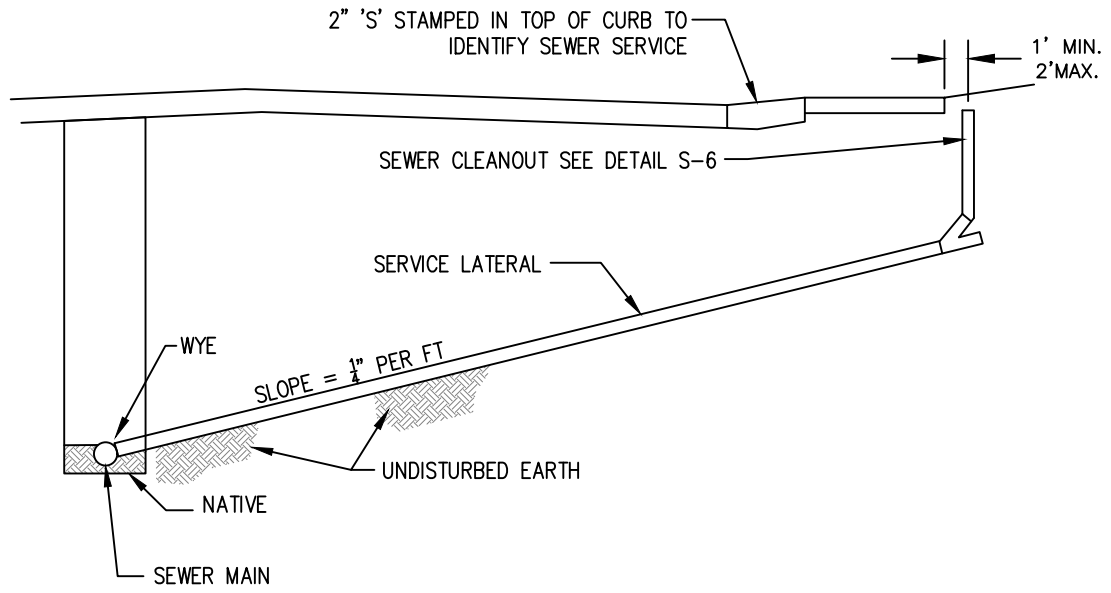
**CITY OF LATHROP**  
 DEPARTMENT OF PUBLIC WORKS  
**COMPOSITE MANHOLE  
 COVER WITHIN 500'  
 OF PUMP STATION**



**STANDARD  
 DETAIL**

Date: **JULY 2024**

Drawing No:  
**S-8**



**NOTES:**

1. All services shall be 4" inside diameter or as shown on plan.
2. All cleanout pipe and fittings shall be same size and material as the service sewer in which they connect.
3. All caps shall be threaded plugs.
4. PVC pipe shall be SDR-26 minimum strength.

NOT TO SCALE

Approved by:

*[Signature]*  
City Engineer

No	Revised	Date

**CITY OF LATHROP**  
DEPARTMENT OF PUBLIC WORKS

**SANITARY SEWER  
LATERAL**



**STANDARD  
DETAIL**

Date: JULY 2024  
Drawing No:  
**S-9**