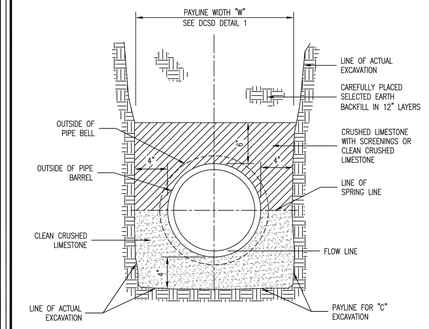
ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"W" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. CONCRETE ENCASEMENT	INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"W" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. CONCRETE ENCASEMENT
4	30	2.50	3.28				
6	30	2.50	3.59				
8	30	2.50	3.87				
10	30	2.50	4.09				
12	30	2.50	4.25				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 23	41	3.42	5.94
21	39	3.25	6.61				
24	42	3.50	7.39	19 x30	49	4.08	7.68
27	45	3.75	8.18	22 x 34	53	4.42	8.61
30	49	4.08	9.30	24 x 38	58	4.83	9.70
33	53	4.42	10.53	27 x 42	62	5.17	10.71
36	56	4.67	11.43	29 x 45	66	5.50	11.72
39	DISCONTINUED			32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	70	5.83	15.67	38 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	48 x 76	101	8.42	21.59
66	91	7.58	23.45	53 x 83	109	9.08	24.35
72	98	8.17	26.37	58 x 91	118	9.83	27.45
78	105	8.75	29.39	63 x 98	126	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.91
90	119	9.92	35.90	72 x 113	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.67	40.69
102	133	11.08	42.99	82 x 128	160	13.33	44.45
108	140	11.67	46.75	87 x 136	168	14.00	47.79
114	147	12.25	50.66	92 x 143	176	14.67	51.70
120	154	12.83	54.72	97 x 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	106 x 166	202	16.83	64.48
144	182	15.17	72.40	116 x 180	218	18.17	73.59

Duckett Creek Sanitary District

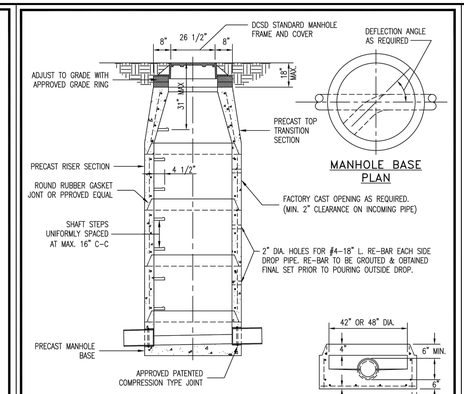
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE | Dwn By: BSM | App By: KLA | Ckd By: MDOB | Date: DEC. 2015 | Detail No. 1



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

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



MANHOLE BASE PLAN

BASE SECTION

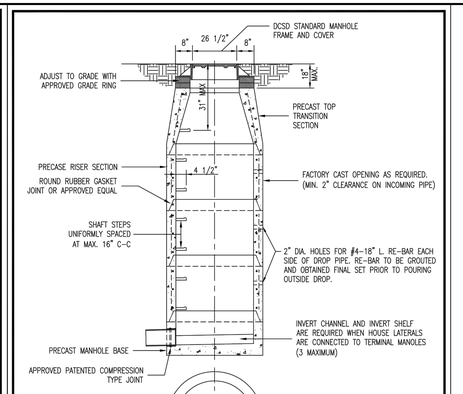
SECTION OF MANHOLE		DIMENSION
TOP TRANSITION	UPPER LOWER	26 1/2" DIA. 42" DIA.
BOTTOM SECTION	8" DIA. PIPE	42" DIA.
BOTTOM SECTION	10" THRU 36" DIA. PIPE	48" DIA.
BOTTOM SECTION	42" DIA. PIPE	60" DIA.

NOTES:
1. ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.
2. BRICK SHALL NOT BE USED ON MANHOLES.

SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

Duckett Creek Sanitary District

PRECAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"BSM | Dwn By: BSM | App By: KLA | Ckd By: MDOB | Date: DEC. 2015 | Detail No. 7



SECTION OF MANHOLE		DIMENSION
TOP TRANSITION	UPPER LOWER	26 1/2" DIA. 42" DIA.
BOTTOM SECTION	8" DIA. PIPE	42" DIA.
BOTTOM SECTION	10" THRU 36" DIA. PIPE	48" DIA.
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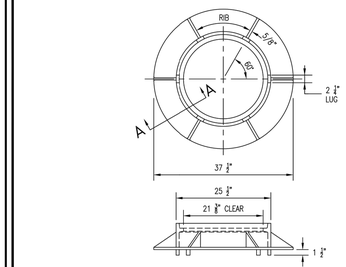
NOTES:
1. ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.
2. BRICK SHALL NOT BE USED ON MANHOLES.

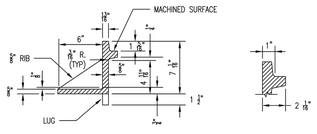
SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

Duckett Creek Sanitary District

TERMINAL MANHOLE FOR SEWERS 8" THROUGH 18" | Dwn By: BSM | App By: KLA | Ckd By: MDOB | Date: DEC. 2015 | Detail No. 8



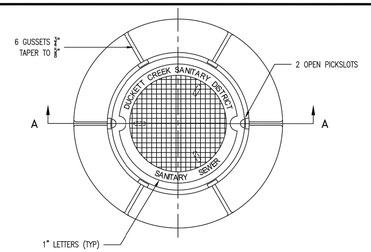
CAST IRON MANHOLE FRAME

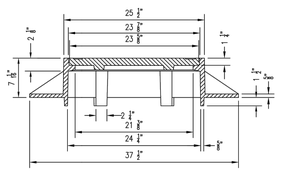


SECTION A-A
(230 lbs)

Duckett Creek Sanitary District

CAST IRON MANHOLE FRAME | Dwn By: BSM | App By: KLA | Ckd By: MDOB | Date: DEC. 2015 | Detail No. 11



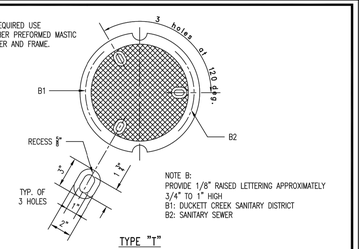


SECTION A-A

Duckett Creek Sanitary District

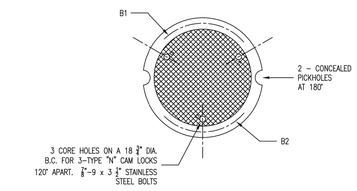
MANHOLE FRAME AND COVER | Dwn By: BSM | App By: KLA | Ckd By: MDOB | Date: DEC. 2015 | Detail No. 12

NOTE:
IF WATERTITE COVER REQUIRED USE APPROVED BUTYL RUBBER PREFORMED MASTIC SEALANT BETWEEN COVER AND FRAME.



NOTE B:
PROVIDE 1/8" RAISED LETTERING APPROXIMATELY 3/4" TO 1" HIGH
B1: DUCKETT CREEK SANITARY DISTRICT
B2: SANITARY SEWER

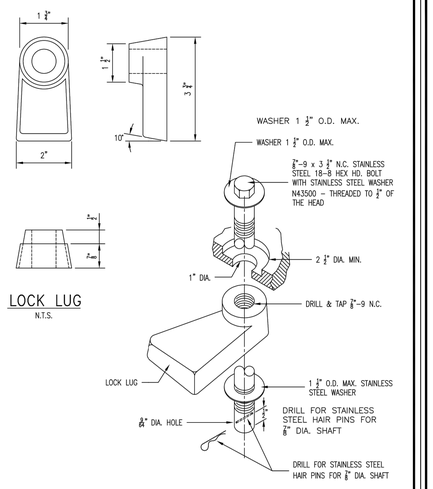
TYPE "I"



TYPE "N"

Duckett Creek Sanitary District

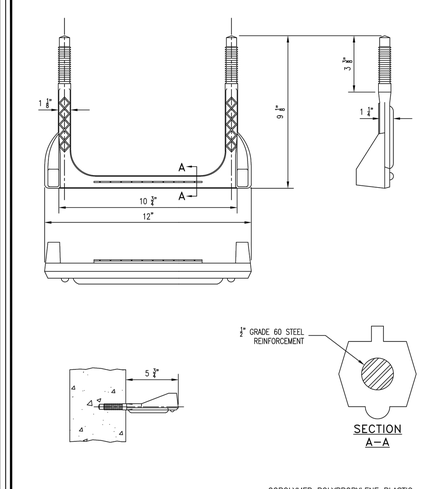
CAST IRON MANHOLE COVERS (LOCK TYPE) | Dwn By: BSM | App By: KLA | Ckd By: MDOB | Date: DEC. 2015 | Detail No. 14



LOCK LUG
N.T.S.

Duckett Creek Sanitary District

LOCKING DEVICE FOR TYPE "N" LOCK TYPEMAN HOLE COVER | Dwn By: BSM | App By: KLA | Ckd By: MDOB | Date: DEC. 2015 | Detail No. 16



SECTION A-A

COPOLYMER POLYPROPYLENE PLASTIC

Duckett Creek Sanitary District

MANHOLE STEP FOR PRECAST MANHOLE | Dwn By: BSM | App By: KA | Ckd By: MDOB | Date: DEC. 2015 | Detail No. 18

PROJECT TITLE:
CHILDREN'S LIGHTHOUSE
EARLY LEARNING CENTER
2570 SOMMERS ROAD
O'FALLON, MISSOURI 63368

Bax Project # 06-12478E Issue Date: 9/21/2023

ENGINEERING SURVEYING LAND PLANNING
221 Point West Blvd.
St. Charles, MO 63301
636-928-5552
FAX 928-1718

REFERENCE DRAWINGS ONLY, ENGINEERS SEAL DOES NOT APPLY TO THESE DETAILS

REVISIONS

11-3-23	city, county, dcsd & pswd2 comments

Developer / Owner:
JAFRI LLC. ASHLEY FANGMAN
4010 CORKWOOD CT.
COLUMBIA, MO 65203
417-766-8874 - ashleyfangmann@gmail.com

DUCKETT CREEK SANITARY DISTRICT DETAILS

P+Z No. # 23-004744
Approval Date: July 6, 2023
City No. #