

Outfall Elevations and Photos

Information on the outfalls for the four dam inundation pools, Sand Springs, Zink, South Tulsa/Jenks and Bixby, are included in this appendix. A table for each dam categorizes the outfalls by the elevation of the outfall invert. The categories are below pool, 0 to 2 ft above pool and 2ft or greater above pool. When the invert is below or within 2 ft of the pool, pictures of the outfall are included in this appendix. Some outfall pictures date from a survey done in March 2015 and some from 2009 when the Preliminary Project Management Plan was developed.

Sand Springs Outfalls

Pool	ID Number	Description	Pipe Material	Outfall Elevation	Below Pool	0 to 2FT above Pool	2 FT or greater above Pool
Sand Springs	9001	2-6'X5'	RCB	645.3			X
Sand Springs	9002	18"	RCP	647.3			X
Sand Springs	9004	5'x6'	RCB	654.7			X
Sand Springs	9005	9'DIA	CMP	645.4			X
Sand Springs	9006	2'X4'	RCB	669.2			X
Sand Springs	9007	4'X2'	RCB	671.9			X
Sand Springs	9008	4'X3'	RCB	660.3			X
Sand Springs	9009	2'X2'	RCB	687.9			X
Sand Springs	9010	42"	RCP	647.5			X
Sand Springs	9011	4'X4'	RCB	653.5			X
Sand Springs	9012	3-13'X14'	RCB	635.9	X		
Sand Springs	9013	24"	RCP	653.1			X
Sand Springs	10001	4-48"	RCP	637.5	X		
Sand Springs	10002	72"	RCP	634.8	X		
Sand Springs	10003	18"	RCP	643.6			X
Sand Springs	10004	18"	CMP	639.9		X	
Sand Springs	10005	3-48"	RCP	638.1		X	
Sand Springs	10006	60"	RCP	639.9		X	
Sand Springs	10007	60"	RCP	640.0			X
Sand Springs	10008	18"	RCP	641.3			X

Sand Springs Outfall Photos

The photos below are for stormwater outfalls that are below the pool or within 2 ft above the pool.



Sand Springs #9012, 3-13'x14', 2.12' below, Photo 1



Sand Springs #10001, 4-48'', 0.55' below, Photo 1



Sand Springs #9012, 3-13'x14', 2.12' below, Photo 2



Sand Springs #10001, 4-48'', 0.55' below, Photo 2



Sand Springs #9012, 3-13'x14', 2.12' below, Photo 3



Sand Springs #10002, 72'', 3.17' below, Photo 1



Sand Springs #10001 & #10002, Photo 1



Sand Springs #10004, 18", 1.91' above, Photo 3



Sand Springs #10004, 18", 1.91' above, Photo 1



Sand Springs #10005, 3-48", 0.07' above, Photo 1



Sand Springs #10004, 18", 1.91' above, Photo 2



Sand Springs #10005, 3-48", 0.07' above, Photo 2



Sand Springs #10005, 3-48", 0.07' above, Photo 3



Sand Springs #10006, 60", 1.9' above, Photo2



Sand Springs #10006, 60", 1.9' above, Photo 1



Sand Springs #10005 & #10006, Photo 1

Zink Outfalls

TABLE X-X
Zink Outfalls

Pool	ID Number	Description	Pipe Material	Outfall Elevation	Below Pool	0 to 2FT above Pool	2 FT or greater above Pool
Zink	2034	16 "	CPP	597.5			X
Zink	2035	18 "	RCP	598.3			X
Zink	2036	96 "	RCP	594.6	X		
Zink	2037	30 "	RCP	621.0		X	
Zink	2038	15 "	CMP	597.0			X
Zink	2039	30 "	RCP	597.1			X
Zink	2040	22x14'	RCP	594.4	X		
Zink	2041	18 "	RCP	620.7			X
Zink	2042	40 "	RCP	596.6		X	
Zink	2043	18 "	RCP	624.5		X	
Zink	2044	12 "	RCP	621.6			X
Zink	2045	12 "	RCP	634.8			X
Zink	2046	18 "	RCP	638.1			X
Zink	2047	18 "	RCP	621.3			X
Zink	2048	36 "	RCP	618.0	X		
Zink	2049	18 "	RCP	621.5			X
Zink	2050	15 "	RCP	601.5			X
Zink	2051	10X10	RCB	621.4	X		
Zink	2052	18 "	RCP	606.0			X
Zink	2053	24 "	RCP	604.6			X
Zink	2054	18 "	RCP	603.0			X
Zink	2055	12 "	RCP	635.9			X
Zink	2056	36 "	RCP	599.9			X
Zink	2057	24 "	RCP	598.1			X
Zink	2058	24 "	RCP	602.3			X
Zink	2059	48 "	CMP	624.8			X
Zink	2060	24'X14'	RCP	602.5			X
Zink	2061	24'X14'	RCP	605.0			X
Zink	2062	24'X14'	RCP	604.8			X
Zink	2063	10'X10'	RCB	621.3	X		

Pool	ID Number	Description	Pipe Material	Outfall Elevation	Below Pool	0 to 2FT above Pool	2 FT or greater above Pool
Zink	2064	108 "	RCP	622.0		X	
Zink	2065	96 "	RCP	618.7		X	
Zink	2066	96 "	RCP	618.8		X	
Zink	2067	96 "	RCP	616.5		X	
Zink	2068	n.a.	RCP	607.4			X
Zink	2069	18 "	RCP	601.8			X
Zink	3001	84"	RCP	593.8	X		
Zink	3002	60"	RCP	621.1	X		
Zink	3003	24"	RCP	621.2		X	
Zink	3004	24"	RCP	621.0		X	
Zink	3005	36"	RCP	618.4		X	
Zink	3006	36"	RCP	621.2		X	
Zink	3007	12"	RCP	618.1		X	
Zink	3008	18"	RCP	618.7	X		
Zink	3009	60"	CMP	622.6			X
Zink	3010	48"	CMP	604.6			X
Zink	3011	15"	RCP	637.5			X
Zink	3012	24"	RCP	616.2		X	
Zink	3013	15"	RCP	598.2			X
Zink	3014	18"	RCP	621.0		X	
Zink	3015	30"	RCP	596.3			X
Zink	11005	18"	STL	613.5			X
Zink	11006	30"	RCP	623.5			X
Zink	11007	CONOCO	GAS1 ST	624.1			X
Zink	11008	60"	CMP	604.1			X
Zink	11009	18"	RCP	607.0			X
Zink	11010	60"	CMP	622.0			X
Zink	11011	48"	CMP	607.0			X
Zink	11012	18"	CMP	613.3			X
Zink	11013	2-36"	CMP	610.4			X
Zink	11014	36"	CMP	612.5			X
Zink	11015	36"	CMP	614.0			X
Zink	11016	36"	CMP	601.5			X

Pool	ID Number	Description	Pipe Material	Outfall Elevation	Below Pool	0 to 2FT above Pool	2 FT or greater above Pool
Zink	11017	2-13'X15' 1-17'X15'	RCB	623.9			X
Zink	11018	24"	STL	625.3			X
Zink	11019	18"	STL	610.4			X
Zink	11020	24"	STL	607.7			X
Zink	11021	CONOCO	GAS1 -	609.3			X
Zink	11022	18"	CMP	609.5			X
Zink	11023	36"	RCP	611.8			X
Zink	11024	36"	RCP	608.4			X
Zink	11025	3-24"	CMP	618.3	X		
Zink	11026	15"	STL	600.9			X
Zink	11027	MAGELLAN	GAS2 ST	602.1			X
Zink	11028	MAGELLAN	GAS2 -	602.0			X
Zink	11029	18"	CMP	600.3			X
Zink	11030	30"	STL	602.2			X
Zink	11031	48"	CMP	601.7			X
Zink	11032	15"	CMP	600.5			X
Zink	11033	12"	CMP	600.6			X
Zink	11034	8"	CMP	603.9			X
Zink	11035	18"	CMP	603.9			X
Zink	11036	36"	RCP	610.6			X

Zink Outfall Photos

The photos below are for stormwater outfalls that are below the pool or within 2 ft above the pool.



Zink #2036, 96", 3.81' below, Photo 1



Zink #2037, 30", 0.66' above, Photo 1



Zink #2036, 96", 3.81' below, Photo 2



Zink #2037, 30", 0.66' above, Photo 2



Zink #2036, 96", 3.81' below, Photo 3



Zink #2037, 30", 0.66' above, Photo 3



Zink #2040, 22'x14', 1.3' below, Photo 1



Zink #2042, 40", 1.27' above, Photo 2



Zink #2040, 22'x14', 1.3' below, Photo 2



Zink #2043, 18", 1.52' above, Photo 1



Zink #2042, 40", 1.27' above, Photo 1



Zink #2043, 18", 1.52' above, Photo 2



Zink #2048, 36", 1.89' below, Photo 1



Zink #2051, 10'x10', 3.48' below, Photo 3



Zink #2051, 10'x10', 3.48' below, Photo 1



Zink #2063, 10'x10', 1.23' below, Photo 1



Zink #2051, 10'x10', 3.48' below, Photo 2



Zink #2063, 10'x10', 1.23' below, Photo 2



Zink #2063, 10'x10', 1.23' below, Photo 3



Zink #2064, 108", 1.05' above,
Zink #2065, 96", 1.05' above, Photo 1



Zink #2064, 108", 1.05' above, Photo 1



Zink #2066, 96", 2.01' above,
Zink #2067, 96", 1.98' above, Photo 1



Zink #2065, 96", 1.05' above, Photo 1



Zink #3001, 84", 2.0' below, Photo 1



Zink #3001, 84", 2.0' below, Photo 2



Zink #3002, 60", 1.67' below, Photo 1



Zink #3001, 84", 2.0' below, Photo 3



Zink #3002, 60", 1.67' below, Photo 2



Zink #3001, 84", 2.0' below, Photo 4



Zink #3003, 24", 1.29' above, Photo 1



Zink #3003, 24", 1.29' above,
Zink #3004, 24", 1.42' above,
Zink #3005, 36", 1.15' above,
Zink #3006, 36", 1.2' above,
Zink #3007, 12", 1.0' above, Photo 1



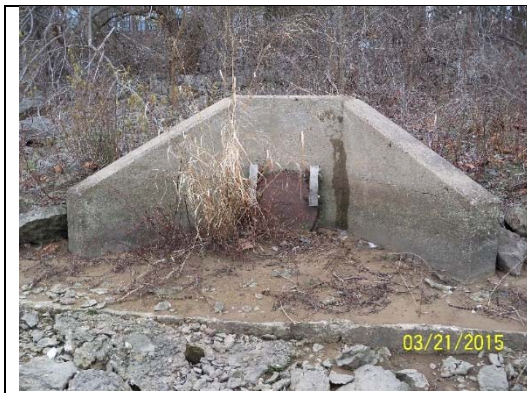
Zink #3008, 18", 1.62' below, Photo 2



Zink #3006, 36", 1.2' above,
Zink #3007, 12", 1.0' above, Photo 1



Zink #3012, 24", 1.24' above, Photo 1



Zink #3008, 18", 1.62' below, Photo 1



Zink #3012, 24", 1.24' above, Photo 2



Zink #3014, 18", 1.55' above, Photo 1



Zink #11025, 3 at 24", 1.33' below, Photo 2



Zink #3014, 18", 1.55' above, Photo 2



Zink #11025, 3 at 24", 1.33' below, Photo 3



Zink #11025, 3 at 24", 1.33' below, Photo 1

South Tulsa/ Jenks Outfalls

TABLE X-X

South Tulsa/Jenks Outfalls

Pool	ID Number	Description	Pipe Material	Outfall Elevation	Below Pool	0 to 2FT above Pool	2 FT or greater above Pool
Jenks	4001	12inch	DIPT	625.1	X (Pipeline, no outfall)		
Jenks	4002	42inch	CPP	627.5		X	
Jenks	4003	12inch	PVC	635.8			X
Jenks	4004	42inch	CPP	628.2		X	
Jenks	4005	21inch	CPP	625.8			X
Jenks	4006	24inch	RCP	627.3			X
Jenks	4007	60inch	RCP	626.1			X
Jenks	4008	36inch	RCP	629.0			X
Jenks	4009	36inch	RCP	629.2		X	
Jenks	4010	6inch	PVC	629.4			X
Jenks	4011	54inch	RCP	625.7		X	
Jenks	4012	42inch	RCP	629.8			X
Jenks	4013	66inch	RCP	640.7			X
Jenks	4014	7'X7'	RCB	641.3			X
Jenks	4015	48inch	RCP	640.3	X		
Jenks	4016	60inch	RCP	625.7	X		
Jenks	4017	60inch	RCP	635.2			X
Jenks	4018	60inch	RCP	625.1		X	
Jenks	4019	24inch	RCP	628.7			X
Jenks	4020	36inch	RCP	650.2			X
Jenks	5001	74' WIDE	CLD	628.9		X	
Jenks	5002	24inch	RCP	628.2			X
Jenks	5003	7X5inch	RCB	642.6			X
Jenks	5004	6X5inch	RCB	631.6			X
Jenks	5005	66inch	RCP	639.5			X
Jenks	5006	7X9	RCB	630.7			X
Jenks	5007	2-10X10	RCB	625.8			X
Jenks	5008	30inch	RCP	634.0			X
Jenks	5009	24inch	RCP	634.4			X

Pool	ID Number	Description	Pipe Material	Outfall Elevation	Below Pool	0 to 2FT above Pool	2 FT or greater above Pool
Jenks	5010	30inch	RCP	630.1			X
Jenks	5011	48inch	RCP	641.4			X
Jenks	5012	36inch	RCP	647.3			X
Jenks	5013	6inch	PVC	643.6			X
Jenks	5014	24inch	RCP	645.3			X
Jenks	5015	12inch	CPP	639.9			X
Jenks	5016	6inch	PVC	639.9			X
Jenks	5017	30inch	RCP	640.0			X
Jenks	5018	70'	CLD	627.5			X
Jenks	5019	42inch	RCP	653.1			X
Jenks	6001	12"	STLP	639.8	X (Pipeline, no outfall)		
Jenks	6002	12"	STLP	641.7	X (Pipeline, no outfall)		
Jenks	6003	24"	GAS	632.2			X
Jenks	6004	24"	GAS	628.2			X
Jenks	6005	84"	RCP	647.5			X
Jenks	6006	48"	RCP	653.5			X
Jenks	6007	60"	RCP	687.9			X
Jenks	6008	30"	RCP	660.3			X
Jenks	6009	42"	RCP	654.7			X
Jenks	6010	75"X79"	RCP	645.4			X
Jenks	6011	42"	RCP	669.2			X
Jenks	6012	54"	RCP	671.9			X

South Tulsa/ Jenks Outfall Photos

The photos below are for stormwater outfalls that are below the pool or within 2 ft above the pool.



ST/Jenks #4002 42" – 0.5' above, Photo 1



ST/Jenks #4004 42" – 0.01' above, Photo 2



ST/Jenks #4002 42" – 0.5' above, Photo 2



ST/Jenks #4009 36" – 1.18' above, Photo 1



ST/Jenks #4004 42" – 0.01' above, Photo 1



ST/Jenks #4011 54" – 1.15' above, Photo 1



ST/Jenks #4011 54" – 1.15' above, Photo 2



ST/Jenks #4004 42" – 0.01' above, Photo 1



ST/Jenks #4011 54" – 1.15' above, Photo 3



ST/Jenks #4016 60" – 3.22' below, Photo 1



ST/Jenks #4015 48" – 0.38' below, Photo 1



ST/Jenks #4016 60" – 3.22' below, Photo 2



ST/Jenks #4018 60" – 1.34' above, Photo 1



ST/Jenks #5001 74" – 0.01' above, Photo 2



ST/Jenks #4018 60" – 1.34' above, Photo 1



ST/Jenks #5001 74" – 0.01' above, Photo 1

Bixby Outfalls

TABLE X-X
Bixby Outfalls

Pool	ID Number	Description	Pipe Material	Outfall Elevation	Below Pool	0 to 2FT above Pool	2 FT or greater above Pool
Bixby	12039	8"	PVC	604.7			X
Bixby	12042	TOP	RCP	590.3			X
Bixby	12064	4'Wx4'H-FLAPGATE	RCB	581.6	X		
Bixby	12065	2-30"-FLAPGATE	RCP	591.8			X
Bixby	12066	18"	RCP	602.0			X

Outfall Photos

The photos below are for stormwater outfalls that are below the pool or within 2 ft above the pool.



Bixby #12064 4'x4; Flapgate – 1.39' below, Photo 1



Bixby #12064 4'x4; Flapgate – 1.39' below, Photo 3



Bixby #12064 4'x4; Flapgate – 1.39' below, Photo 2



Bixby #12064 4'x4; Flapgate – 1.39' below, Photo 4