



## PHASE II LONG TERM CONTROL PLAN

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#### Appendix M

#### Recommended Solution - Opinion of Probable Capital Costs

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Table M1 Recommended Solution - Opinion of Probable Capital Costs

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Table M1  
 City of Lancaster  
 Phase II LTCP  
 Recommended Solution - Opinion of Probable Capital Costs

2025 CIP Year	2035 CIP Year	Funding	Project Type	Improvement Type	Basin 1	Project Name	Pipe ID #	Unit Cost Description	Description	Pipe Diameter	Quantity	Unit	Unit Cost	Total Cost
2017	2017	na	CSO Reduction	Storm Sewer Project	CSO 1004	Cherokee Drive CDBG	244	NA	New Storm Sewer			FT	n/a	-
2017	2017	na	CSO Reduction	Storm Sewer Project	CSO 1004	Cherokee Drive CDBG	245	NA	New Storm Sewer			FT	n/a	-
2017	2017	na	CSO Reduction	Storm Sewer Project	CSO 1004	Cherokee Drive CDBG	246	NA	New Storm Sewer			FT	n/a	-
2017	2017	na	CSO Reduction	Storm Sewer Project	CSO 1004	Cherokee Drive CDBG	247	NA	New Storm Sewer			FT	n/a	-
2017	2017	Storm	CSO Reduction	Storm Sewer Project	CSO 1004	Cherokee Drive CDBG	-	NA	This is the LS Price for the Cherokee Drive Project		1	LS	\$ 750,000	\$ 750,000
2016	2018	Wastewater	CSO Reduction	WPCF Project	CSO 1004	Lawrence Street EQ	105	48" Open-Cut Sanitary Sewer	Replace 360 feet of existing 18" pipe with 48" pipe	48	360	FT	\$ 880	\$ 316,800
2016	2018	Wastewater	CSO Reduction	WPCF Project	CSO 1004	Lawrence Street EQ	106	60" Open-Cut Sanitary Sewer	Replace 25 feet of existing 48" pipe with 60" pipe	60	25	FT	\$ 1,020	\$ 25,500
2021	2032	Wastewater	CSO Reduction	WPCF Project	CSO 1004	Lawrence Street EQ			3.3 MG EQ with 55 MGD Pump Station at the LSWPCF		1	LS	\$ 12,000,000	\$ 12,000,000
2016	2016	Storm	CSO Reduction	Storm Sewer Project	CSO 1008	Bank Alley Reconstruction	223A	Curb and Gutter Stormwater System - Increase Weir Height	Curb and Gutter Stormwater System - be 19-inch-diameter		1	LS	\$ 50,000	\$ 50,000
2014	2017	Wastewater	CSO Reduction	Sanitary Sewer Project	CSO 1008	CSO 1008 Improvements			Increase Weir offset from 12" to 19"		1	LS	\$ 30,000	\$ 30,000
2013	2013	Storm	CSO Reduction	Storm Sewer Project	CSO 1008	Main Street Catch Basin Relocation			Removal of CB from Sanitary Sewer		1	LS	\$ 22,000	\$ 22,000
2015	2015	Storm	CSO Reduction	Storm Sewer Project	CSO 1008	Memorial Drive Storm Sewer	225	18" Open-Cut Storm Sewer		18	540	FT	\$ 405	\$ 218,700
2025	2022	Storm	CSO Reduction	Storm Sewer Project	CSO 1009	Broad St Storm Sewer	219	30" Open-Cut Storm Sewer		30	482	FT	\$ 490	\$ 236,180
2014	2014	Storm	CSO Reduction	Storm Sewer Project	CSO 1009	CSO 1009 Catch Basin Removal	-		Reroute 3 catch basins on Memorial Drive north of Mulberry to downstream of CSO 1009.		1	LS	\$ 25,000	\$ 25,000
2025	2022	Storm	CSO Reduction	Storm Sewer Project	CSO 1009	CSO 1009 Miller Park at Mulberry	222	42" Open-Cut Storm Sewer		42	715	FT	\$ 588	\$ 420,420
2025	2029	Storm	CSO Reduction	Storm Sewer Project	CSO 1009	Mulberry St Storm Sewer	220	30" Open-Cut Storm Sewer		30	1,094	FT	\$ 490	\$ 536,060
2025	2029	Storm	CSO Reduction	Storm Sewer Project	CSO 1009	Mulberry St Storm Sewer	221	42" Open-Cut Storm Sewer		42	397	FT	\$ 588	\$ 233,436
2013	2013	Storm	CSO Reduction	Storm Sewer Project	CSO 1012	Broad Fifth Inlet Relocation	-		Relocating the leads from 4 catch basins at intersection of Fifth /Broad from combined sewer running west on fifth (completed)		1	LS	\$ 22,000	\$ 22,000
2020	2020	Storm	CSO Reduction	Storm Sewer Project	CSO 1012	Fifth Ave Sewer Separation	215	36" Open-Cut Storm Sewer		36	547	FT	\$ 520	\$ 284,440
2020	2020	Storm	CSO Reduction	Storm Sewer Project	CSO 1012	Fifth Ave Sewer Separation	216	42" Open-Cut Storm Sewer		42	674	FT	\$ 588	\$ 396,312
2019	2020	Storm	CSO Reduction	Storm Sewer Project	CSO 1012	Fifth Ave Sewer Separation	217	48" Open-Cut Storm Sewer		48	1,399	FT	\$ 630	\$ 881,370
2020	2020	Storm	CSO Reduction	Storm Sewer Project	CSO 1012	Fifth Avenue Storm Sewer	213	24" Open-Cut Storm Sewer		24	223	FT	\$ 455	\$ 101,465
2020	2020	Storm	CSO Reduction	Storm Sewer Project	CSO 1012	Fifth Avenue Storm Sewer	214	30" Open-Cut Storm Sewer		30	642	FT	\$ 490	\$ 314,580
2025	2030	Storm	CSO Reduction	Storm Sewer Project	CSO 1012	High Street Storm Sewer	212	18" Open-Cut Storm Sewer		18	491	FT	\$ 405	\$ 198,855
2022	2030	Storm	CSO Reduction	Storm Sewer Project	CSO 1012	Mulberry East Storm Sewer	218	18" Open-Cut Storm Sewer	1488 ft. of 18" storm sewer	18	1,488	FT	\$ 405	\$ 602,640

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2025 CIP Year	2035 CIP Year	Funding	Project Type	Improvement Type	Basin 1	Project Name	Pipe D #	Unit Cost Description	Description	Pipe Diameter	Quantity	Unit	Unit Cost	Total Cost
2021	2021	Storm	CSO Reduction	Storm Sewer Project	CSO 1013	Forest Rose Sixth Ave Sewer Separation	211	48" Open-Cut Storm Sewer		48	1,636	FT	\$ 630	\$ 1,030,680
2020	2030	Storm	CSO Reduction	Storm Sewer Project	CSO 1013	Sixth Ave Storm Sewer	210	24" Open-Cut Storm Sewer		24	984	FT	\$ 455	\$ 447,720
2015	2015	Storm	CSO Reduction	Sanitary Sewer Project	CSO 1014	CSO 1014 Improvements	101	Increase Underflow Pipe to 18"	Add 18" underflow pipe from regulator to 36" Interceptor upstream of YMCA	18	801	FT	\$ 304	\$ 243,304
2015	2015	Wastewater	CSO Reduction	Sanitary Sewer Project	CSO 1014	CSO 1014 Improvements	-	Abandon 12"	Abandon 12"	12	1	LS	\$ 10,000	\$ 10,000
2025	2018	Wastewater	CSO Reduction	Sanitary Sewer Project	CSO 1019	CSO 1019	102	Increase Underflow Pipe to 30"	Increase underflow pipe 18" to 30" from CSO 1019 regulator to Main St Interceptor POC	30	201	FT	\$ 368	\$ 73,868
2025	2018	Wastewater	CSO Reduction	Sanitary Sewer Project	CSO 1019	CSO 1019	-	Increase Weir Height (12"-18")	Increase underflow Orifice 12" to 24"	-	1	LS	\$ 50,000	\$ 50,000
2025	2022	Wastewater	CSO Reduction	Sanitary Sewer Project	CSO 1029	CSO 1029	-	Increase Weir Height (4' - 5')	Increase Weir offset from 1 8' to 7 5'	-	1	LS	\$ 115,000	\$ 115,000
2018	2022	Storm	CSO Reduction	Storm Sewer Project	CSO 1029	Sixth Avenue Storm Sewer	229	36" Open-Cut Storm Sewer		36	446	FT	\$ 520	\$ 231,920
2018	2022	Storm	CSO Reduction	Storm Sewer Project	CSO 1029	Sixth Avenue Storm Sewer	230	36" Open-Cut Storm Sewer		36	537	FT	\$ 520	\$ 279,240
2018	2022	Storm	CSO Reduction	Storm Sewer Project	CSO 1029	Sixth Avenue Storm Sewer	231	48" Open-Cut Storm Sewer		48	1,814	FT	\$ 630	\$ 1,142,820
2018	2022	Storm	CSO Reduction	Storm Sewer Project	CSO 1029	Sixth Avenue Storm Sewer	232	60" Open-Cut Storm Sewer		60	603	FT	\$ 920	\$ 554,760
2025	2016	Wastewater	CSO Reduction	Sanitary Sewer Project	CSO 1033	CSO 1033 Improvements	100	15" Open-Cut Sanitary Sewer	New 15" underflow line from regulator to 36" Interceptor	15	600	FT	\$ 495	\$ 297,000
2025	2016	Wastewater	CSO Reduction	Sanitary Sewer Project	CSO 1033	CSO 1033 Improvements	-	Abandon 10"	Abandon 10"	-	1	LS	\$ 7,000	\$ 7,000
2015	2015	Storm	CSO Reduction	Storm Sewer Project	CSO 1033	North School Alley Reconstruction	204	18" Open-Cut Storm Sewer	Reconstruction of Alley	18	220	LS	\$ 45,000	\$ 45,000
2014	2014	Wastewater	CSO Reduction	Pump Station Project		South Broad Street Express Sewer		NA	Broad Street Pump Station I&C Upgrades	-	1	LS	NA	-
2014	2014	Wastewater	CSO Reduction	Sanitary Sewer Project		South Broad Street Express Sewer	70	NA	300 feet of new 14" FM at Broad Street PS to CSO 1004 Structure	14	300	FT	NA	-
2014	2014	Wastewater	CSO Reduction	Sanitary Sewer Project		Express Sewer	71	NA		42	934	FT	NA	-
2015	2014	Wastewater	CSO Reduction	Sanitary Sewer Project		South Broad Street Express Sewer	71B	NA	New 48" Sanitary Sewer redirecting separate sanitary flow to downstream of CSO 1004	48	280	FT	NA	-
<b>Total</b>														<b>\$ 22,194,069</b>
<b>Stormwater</b>														<b>\$ 9,265,902</b>
<b>Wastewater</b>														<b>\$ 12,928,167</b>

Notes:  
1 Costs are based on 2014 Dollars.  
2 Costs include a 1.30 contingency factor and a 1.23 engineering cost factor.