Appendix J CLASS 5 COST ESTIMATES





Estimate Class:

5

Wilsonville Facility Plan Project: PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 2/28/2022 Zip Code: 97070 By: **Daniel Chien**

Carollo Job # 11962A.00 Reviewed:

Element Backup UV System Improvement ENR: 13,473

iement	Backup OV System improvement	LINIX.	15,475
NO.	DESCRIPTION		TOTAL
1	Demolition		¢62.72
1	Demonition		\$63,732
2	UVSigna 2-Row System		\$369,310
	Installation	20%	\$73,863
	Weir, Gate, Davit Crane, and Appurtenances	30%	\$110,795
	E&IC	30%	\$110,795
3	Discharge Channel Improvements		\$100,000
	TOTAL DIRECT COST		\$828,501
	Contingency	30.0%	\$249,000
	Subtotal		\$1,077,501
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$108,000
	Subtotal		\$1,185,501
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$1,185,501
	General Contractor Overhead and Profit	15.0%	\$178,000
	Subtotal		\$1,363,501
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$1,363,501
	Engineering, Legal & Administration Fees	25.0%	\$341,000
	TOTAL ESTIMATED PROJECT COST		\$1,705,000



PROJECT SUMMARY Estimate Class:

5

Project:Wilsonville Facility PlanPIC:B. MatsonClient:City of WilsonvillePM:D. PriceLocation:Wilsonville, ORDate:2/28/2022Zip Code:97070By:Daniel Chien

Carollo Job # 11962A.00 Reviewed:

Element Fiber Optic Addition ENR: 13,473

Element	Fiber Optic Addition	ENK.	13,473
NO.	DESCRIPTION		TOTAL
1	Domolitica		Evaludad
1	Demolition		Excluded
2	Trench and Backfill		\$11,854
3	Conduit and Cables		\$15,806
3	Conduit and Cables		\$15,600
	TOTAL DIRECT COST		\$27,660
	Contingency	30.0%	\$8,000
	Subtotal		\$35,660
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$4,000
	Subtotal		\$39,660
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$39,660
	General Contractor Overhead and Profit	15.0%	\$6,000
	Subtotal		\$45,660
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$45,660
	Engineering, Legal & Administration Fees	25.0%	\$11,000
	TOTAL ESTIMATED PROJECT COST		\$57,000



Estimate Class: 5

Project: Wilsonville Facility Plan PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 2/28/2022 Zip Code: 97070 By:⊦ **Daniel Chien**

Carollo Job # 11962A.00 Reviewed:

Element Seismic Improvements ENR: 13,473

NO.	DESCRIPTION	TO [*]	TOTAL
1	Operations Building Retrofit		\$418,499
2	Process Gallery Retrofit		\$29,227
3	Workshop Retrofit		\$74,621
4	Overall Plant (Non-Structural) Retrofit		\$3,731
	TOTAL DIRECT COST		\$526,078
	Contingency	30.0%	\$158,000
	Subtotal		\$684,078
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$68,000
	Subtotal		\$752,078
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$752,078
	General Contractor Overhead and Profit	15.0%	\$113,000
	Subtotal		\$865,078
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$865,078
	Engineering, Legal & Administration Fees	25.0%	\$216,000
	TOTAL ESTIMATED PROJECT COST		\$1,082,000



Estimate Class: 5

Project: Wilsonville Facility Plan PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 2/28/2022 Zip Code: 97070 By: Conklin, Sprick

Carollo Job # 11962A.00 Reviewed:

Element New Aeration Basin + Blower + Retaining Wall ENR: 13,473

NO.	DESCRIPTION		TOTAL
1	Site Civil		
	Excavation, disposal, dewatering		\$1,232,97
	Retaining Wall		\$832,84
	Access Road		\$69,89
	Building Sitework		\$57,00
	Yard Piping		\$123,978
2	Aeration Basin		
	Concrete		\$1,167,689
	Equipment		\$256,02
	Special		\$72,783
	Mechanical		\$351,249
	E&IC	30%	\$554,32
3	Blower		
	Demolition		\$10,000
	1 x Aerzen 3000 scfm blower		\$152,579
	Installation	30%	\$45,77
	E&IC	30%	\$45,774
	TOTAL DI	IRECT COST	\$4,972,890
	Contingency	30.0%	\$1,492,000
		Subtotal	\$6,464,890
	General Conditions (mobilization, permits, bonds/insu	urance, etc.) 10.0%	\$646,000
		Subtotal	\$7,110,890
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
		Subtotal	\$7,110,890
	General Contractor Overhead and Profit	15.0%	\$1,067,000
		Subtotal	\$8,177,890
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$8,177,890
	Engineering Logal 9 Administration Face	25.0%	\$2,044,000
	Engineering, Legal & Administration Fees	25.0 /0	Ψ2,044,000



Estimate Class:

5

Project: Wilsonville Facility Plan PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 2/28/2022 Zip Code: 97070 By: Conklin, Sprick

Carollo Job # 11962A.00 Reviewed:

Element MBR Phase 1, Two Blowers, Screens, Electrical Upgrades ENR: 13,473

Licinoni	mbit i nase 1, 1wo blowers, dereens, Electrical opgrades		10,470
NO.	DESCRIPTION		TOTAL
			\$400.070
1	Stormwater Infrastructure		\$400,070
2	Fine Screens		
	Site Civil		\$25,533
	Yard Piping		\$345,883
	Concrete + Metals		\$412,743
	Equipment + Mechanical		\$2,926,519
	E&IC	30%	\$1,001,778
3	MBR Phase 1 (Structural/Mechanical/Electrical)		\$20,442,310
	Site Civil		\$1,405,778
	Yard Piping		\$1,500,364
4	Blower		
· · · · · · · · · · · · · · · · · · ·	Demolition		\$20,000
	2 x Aerzen 3000 scfm blower		\$305,158
	Installation	30%	\$91,547
	E&IC	30%	\$91,547
5	Electrical Upgrade		\$4,950,201
	TOTAL DIRECT COST		\$33,919,432
	Contingency	30.0%	\$10,176,000
	Subtotal		\$44,095,432
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$4,410,000
	Subtotal		\$48,505,432
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$48,505,432
	General Contractor Overhead and Profit	15.0%	\$7,276,000
	Subtotal		\$55,781,432
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$55,781,432
	Engineering, Legal & Administration Fees	25.0%	\$13,945,000
	TOTAL ESTIMATED PROJECT COST		\$69,727,000



Estimate Class: 5

By:

Daniel Chien

Project: Wilsonville Facility Plan PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Date: Wilsonville, OR 2/28/2022 Zip Code: 97070

Carollo Job # 11962A.00 Reviewed:

13,473 **Element Secondary Clarifier Mechanism** ENR:

	occondary clariner meenanism			10,470
NO.	DESCRIPTION			TOTAL
1	Demolition			\$110,000
2	Two (2) 70 ft Diameter Secondary Clarifier Mechanisi	m		\$449,663
	Installation	40	0%	\$179,865
	Spray Water, Piping, and Appurtenances	10	0%	\$44,966
	E&IC	5	%	\$22,483
3	Two (2) 70 ft Diameter FRP Weirs and Baffles			\$37,375
	Installation	25	5%	\$8,796
4	Two (2) 70 ft Diameter Secondary Clarifier Bottom Gr	out		\$10,093
	TOTAL DI	RECT COST		\$863,241
	Contingency	30	.0%	\$259,000
		Subtotal		\$1,122,241
	General Conditions (mobilization, permits, bonds/insu	ırance, etc.) 10	.0%	\$112,000
		Subtotal		\$1,234,241
	Sales Tax (Applied to 50% of Total Direct Cost)	0.	0%	\$0
		Subtotal		\$1,234,241
	General Contractor Overhead and Profit	15	.0%	\$185,000
		Subtotal		\$1,419,241
	Escalation to Mid-Point (3% per year)	0.	0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST			\$1,419,241
	Engineering, Legal & Administration Fees	25	.0%	\$355,000
	TOTAL ESTIMATED PROJECT COST			\$1,775,000



Project:

Location:

Zip Code:

Client:

PROJECT SUMMARY Estimate Class:

Wilsonville Facility Plan PIC: B. Matson
City of Wilsonville PM: D. Price
Wilsonville, OR Date: 2/28/2022
97070 By: Conklin, Sprick

5

Carollo Job # 11962A.00 Reviewed:

Element MBR Phase 2 + Two Blowers ENR: 13,473

Element	MBR Phase 2 + Two Blowers	ENR:	13,473
NO.	DESCRIPTION		TOTAL
1	MBR Phase 2		\$625,461
<u>'</u>	MBIXT Hade Z		Ψ020, 10 1
2	Blower		
	Demolition		\$20,000
	2 x Aerzen 3000 scfm blower		\$305,158
	Installation	30%	\$91,547
	E&IC	30%	\$91,547
	TOTAL DIRECT COST		\$1,133,715
	Contingency	30.0%	\$340,000
	Subtotal		\$1,473,715
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$147,000
	Subtotal		\$1,620,715
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$1,620,715
	General Contractor Overhead and Profit	15.0%	\$243,000
	Subtotal		\$1,863,715
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$1,863,715
	Engineering, Legal & Administration Fees	25.0%	\$466,000
	TOTAL ESTIMATED PROJECT COST		\$2,330,000



Estimate Class: 5

Wilsonville Facility Plan Project: PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 2/28/2022 Zip Code: 97070 By: Conklin, Sprick

Carollo Job # 11962A.00 Reviewed:

Element MBR Phase 3 + Two Blowers ENR: 13,473

Element	MBR Phase 3 + 1 Wo Blowers	ENR:	13,473
NO.	DESCRIPTION		TOTAL
1	MBR Phase 3		\$3,023,064
	Yard Piping		\$417,643
	Tara Tiping		Ψ117,010
2	Blower		
	Demolition		\$20,000
	2 x Aerzen 3000 scfm blower		\$305,158
	Installation	30%	\$91,547
	E&IC	30%	\$91,547
	TOTAL DIRECT COST		\$3,948,960
	Contingency	30.0%	\$1,185,000
	Subtotal		\$5,133,960
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$513,000
	Subtotal		\$5,646,960
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$5,646,960
	General Contractor Overhead and Profit	15.0%	\$847,000
	Subtotal		\$6,493,960
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$6,493,960
	Engineering, Legal & Administration Fees	25.0%	\$1,623,000
. <u> </u>	TOTAL ESTIMATED PROJECT COST		\$8,117,00



PROJECT SUMMARY Estimate Class: 5

Wilsonville Facility Plan Project: PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 2/28/2022 Zip Code: 97070 By: C. Clark

Carollo Job # 11962A.00 Reviewed:

Element Solids Dryer Improvement ENR: 13,473

NO.	DESCRIPTION		TOTAL
1	Dewatering and Dryer Building Expansion		\$844,612
2	Biosolids Paddle Dryer		\$4,355,038
	Installation	25%	\$1,088,759
	Piping and Appurtenances	15%	\$653,256
	E&IC	15%	\$653,256
3	Cake Conveyance		\$106,220
	Installation	25%	\$26,555
	E&IC	15%	\$15,933
4	Odor Control		\$294,725
5	Plant Drain Pump Station Relocation		\$100,000
6	Civil Site Improvements		\$195,02
	TOTAL DIRECT COST		\$8,333,37
	Contingency	30.0%	\$2,500,000
	Subtotal		\$10,833,37
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$1,083,000
	Subtotal		\$11,916,37
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$11,916,375
	General Contractor Overhead and Profit	15.0%	\$1,787,000
	Subtotal		\$13,703,375
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$13,703,375
	Engineering, Legal & Administration Fees	25.0%	\$3,426,000



Estimate Class:

5

Wilsonville Facility Plan Project: PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 2/28/2022 Zip Code: 97070 By: **Daniel Chien**

Carollo Job # 11962A.00 Reviewed:

Element UV Equipment Replacement ENR: 13,473

	OV Equipment (topiacement		,
NO.	DESCRIPTION		TOTAL
	Damalitian		#400.000
1	Demolition		\$120,000
2	UVSigna 2-Row System		\$628,238
	Installation	20%	\$125,648
	Weir, Gate, Davit Crane, and Appurtenances	30%	\$188,471
	E&IC	30%	\$188,471
	TOTAL DIRECT COST		\$1,250,829
	Contingency	30.0%	\$375,000
	Subtotal		\$1,625,829
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$163,000
	Subtotal		\$1,788,829
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$1,788,829
	General Contractor Overhead and Profit	15.0%	\$268,000
	Subtotal		\$2,056,829
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$2,056,829
	Engineering, Legal & Administration Fees	25.0%	\$514,000
	TOTAL ESTIMATED PROJECT COST		\$2,571,000



Estimate Class: 5

Wilsonville Facility Plan Project: PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 2/28/2022 Zip Code: 97070 By: M. Sprick

Carollo Job # 11962A.00 Reviewed:

Element Outfall Improvements ENR: 13,473

NO.	DESCRIPTION		TOTAL
1	Demolition		\$100,00
4	Outfall Piping		\$504,92
	TOTAL DIRECT COST	Г	\$604,92
	Contingency	30.0%	\$181,00
	Subtotal		\$785,92
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$79,000
	Subtotal		\$864,922
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$864,922
	General Contractor Overhead and Profit	15.0%	\$130,000
	Subtotal		\$994,922
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$994,922
	Engineering, Legal & Administration Fees	25.0%	\$249,000
	TOTAL ESTIMATED PROJECT COST		\$1,244,000



Estimate Class: 5

Wilsonville Facility Plan Project: PIC: B. Matson Client: City of Wilsonville PM: D. Price Location: Wilsonville, OR Date: 5/6/2022 Zip Code: 97070 By: C. Clark

11962A.00 Carollo Job # Reviewed:

Element Thickening and Dewatering ENR: 13,473

I nickening and Dewatering	ENR:	13,473	
DESCRIPTION		TOTAL	
Demolition		\$42,488	
Two GEA Westfalia CF Series 6000 Decanter Centrifuges		\$796,653	
Installation	25%	\$199,163	
E&IC	15%	\$119,498	
Two ANDRITZ 2.0m Gravity Belt Thickeners		\$458,872	
-	25%	\$114,718	
E&IC	15%	\$68,83	
TOTAL DIRECT COST		\$1,800,224	
Contingency	30.0%	\$540,000	
Subtotal		\$2,340,224	
General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$234,000	
Subtotal		\$2,574,224	
Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0	
Subtotal	\$2,574,224		
General Contractor Overhead and Profit	15.0%	\$386,000	
Subtotal		\$2,960,224	
Escalation to Mid-Point (3% per year)	0.0%	\$0	
TOTAL ESTIMATED CONSTRUCTION COST		\$2,960,224	
Engineering, Legal & Administration Fees	25.0%	\$740,000	
	Demolition Two GEA Westfalia CF Series 6000 Decanter Centrifuges Installation E&IC Two ANDRITZ 2.0m Gravity Belt Thickeners Installation E&IC TOTAL DIRECT COST Contingency Subtotal General Conditions (mobilization, permits, bonds/insurance, etc.) Subtotal Sales Tax (Applied to 50% of Total Direct Cost) Subtotal General Contractor Overhead and Profit Subtotal Escalation to Mid-Point (3% per year)	Demolition Two GEA Westfalia CF Series 6000 Decanter Centrifuges Installation 25% E&IC 15% Two ANDRITZ 2.0m Gravity Belt Thickeners Installation 25% E&IC 15% TOTAL DIRECT COST Contingency 30.0% Subtotal General Conditions (mobilization, permits, bonds/insurance, etc.) 10.0% Subtotal Sales Tax (Applied to 50% of Total Direct Cost) 0.0% Subtotal General Contractor Overhead and Profit 15.0% Subtotal Escalation to Mid-Point (3% per year) 0.0%	

vary from the costs presented as shown.



Estimate Class: 5

Project:Wilsonville Facility PlanPIC:B. MatsonClient:City of WilsonvillePM:D. PriceLocation:Wilsonville, ORDate:5/6/2022

Zip Code: 97070 By:

Carollo Job # 11962A.00 Reviewed:

Element Cooling Tower ENR: 13,473

Liement	Cooling Towel		13,473
NO.	DESCRIPTION		TOTAL
1	Cooling Tower		\$207,966
•	Installation	20%	\$41,593
	E&IC	30%	\$62,390
	TOTAL DIRECT COST		\$311,949
	Contingency	30.0%	\$94,000
	Subtotal		\$405,949
	General Conditions (mobilization, permits, bonds/insurance, etc.)	10.0%	\$41,000
	Subtotal		\$446,949
	Sales Tax (Applied to 50% of Total Direct Cost)	0.0%	\$0
	Subtotal		\$446,949
	General Contractor Overhead and Profit	15.0%	\$67,000
	Subtotal		\$513,949
	Escalation to Mid-Point (3% per year)	0.0%	\$0
	TOTAL ESTIMATED CONSTRUCTION COST		\$513,949
	Engineering, Legal & Administration Fees	25.0%	\$128,000
	TOTAL ESTIMATED PROJECT COST		\$642,000
			•
professional of have no control and method	timate herein is based on our perception of current conditions at the project location. This opinion of accurate costs at this time and is subject to change as the project design matured over variances in the cost of labor, materials, equipment; nor services provided by other is of executing the work or of determining prices, competitive bidding or market conditions rollo Engineers cannot and does not warrant or guarantee that proposals, bids or actual covery from the costs presented as shown.	res. Carollo Engineers ers, contractor's means s, practices or bidding	