

Class B Cost Opinion - Prowse Lift Station Upgrades & Forcemain Replacement

Division/Item	Description	Unit	Estimated Quantity	Material Unit Rate	Material Cost \$	Crew	Crew Rate \$/day	Duration (Days)	Labour/Equip Cost \$	TOTAL ESTIMATE \$
1	General									
1.01	Mobilization/Demobilization	%	3.0%	\$ 1,020,687	\$ 30,621	Incl.			\$ -	\$ 30,621
1.02	Bonding & Insurance	%	5.0%	\$ 1,020,687	\$ 51,034	Incl.			\$ -	\$ 51,034
1.10	Temp. Facilities (oil/water trailers, porta-potty)	Month	2	\$ 2,000	\$ 4,000	Incl.			\$ -	\$ 4,000
1.04	As-constructed Redline Markups	Allow.	1	\$ 3,500	\$ 3,500	Incl.			\$ -	\$ 3,500
1.05	Survey Layout	Allow.	1	\$ 5,000	\$ 5,000	Incl.			\$ -	\$ 5,000
1.06	O&M Manuals	Allow.	1	\$ 2,500	\$ 2,500	Incl.			\$ -	\$ 2,500
1.07	Live-Out Allowance	Month	2	\$ 4,000	\$ 8,000	Incl.			\$ -	\$ 8,000
1.08	Site Fencing & Security	Month	3	\$ 1,500	\$ 4,500	CrewC31	\$ 3,064	1	\$ 3,064	\$ 7,564
1.09	Bypass Work Plan	Allow.	1	\$ 2,000	\$ 2,000	Incl.			\$ -	\$ 2,000
1.10	Sediment and Erosion Control Plan	Allow.	1	\$ 2,500	\$ 2,500	Incl.			\$ -	\$ 2,500
1.11	Dewatering Plan	Allow.	1	\$ 2,000	\$ 2,000	Incl.			\$ -	\$ 2,000
1.12	Traffic & Pedestrian Management Plan	Allow.	1	\$ 1,500	\$ 1,500	Incl.			\$ -	\$ 1,500
1.13	Commissioning and Testing Plan	Allow.	1	\$ 1,500	\$ 1,500	Incl.			\$ -	\$ 1,500
1.14	Hydrovac Utility Locates Prior to Construction	Allow.	1	\$ 5,000	\$ 5,000	Incl.			\$ -	\$ 5,000
<b>Subtotal and Summary</b>					<b>\$123,655</b>			<b>1</b>	<b>\$3,064</b>	<b>\$126,719</b>
2	Site Work									
2.01	Temporary Bypass System	monthly	2	\$ 50,000	\$ 100,000	CrewM4	\$ 2,300	8	\$ 18,400	\$ 118,400
2.02	Traffic Control & Pedestrian Management	weekly	6	\$ 500	\$ 3,000	CrewT1	\$ 1,560	10	\$ 15,600	\$ 18,600
2.03	Dewatering pump & treatment rental	monthly	2	\$ 5,000	\$ 10,000	CrewM4	\$ 2,300	1	\$ 2,300	\$ 12,300
2.04	Demolition & Disposal	L.S.	1	\$ 5,000	\$ 5,000	CrewC31	\$ 3,064	4	\$ 12,256	\$ 17,256
2.05	Excavation, Shoring, and Backfill - Abandon Ex. AC adjacent to Elec Bldg	L.S.	1	\$ 25,000	\$ 25,000	Incl.			\$ -	\$ 25,000
2.06	250 mm DR11 HDPE Forcemain including trenching	Lin.m	127	\$ 650	\$ 82,550	Incl.			\$ -	\$ 82,550
2.07	250 mm DR11 HDPE Tee	ea	1	\$ 1,500	\$ 1,500	Incl.			\$ -	\$ 1,500
2.08	250 mm DR11 HDPE Slub End c/w 316 SS Backing Ring	ea	3	\$ 1,000	\$ 3,000	Incl.			\$ -	\$ 3,000
2.09	250 mm Gate Valves	ea	5	\$ 7,000	\$ 35,000	Incl.			\$ -	\$ 35,000
2.10	100 mm Gate Valves	ea	1	\$ 2,100	\$ 2,100	Incl.			\$ -	\$ 2,100
2.11	Wrap buried valves, couplings & SS piping with Dense	L.S.	1	\$ 2,500	\$ 2,500	CrewM2	\$ 3,040	3	\$ 9,120	\$ 11,620
2.12	150 mm SS Ventilation Gooseneck	ea	2	\$ 1,500	\$ 3,000	CrewC31	\$ 3,064	0.5	\$ 1,532	\$ 4,532
2.13	Bypass Manhole	L.S.	1	\$ 4,000	\$ 4,000	CrewC12	\$ 5,240	1	\$ 5,240	\$ 9,240
2.14	250 mm Hot Tap on AC Forcemain	Allow	1	\$ 15,000	\$ 15,000	Incl.			\$ -	\$ 15,000
2.15	250 mm Line-Stop on AC Forcemain	Allow	1	\$ 15,000	\$ 15,000	Incl.			\$ -	\$ 15,000
2.16	50 mm Hot Tap for Line-Stop Equalization	Allow	1	\$ 5,000	\$ 5,000	Incl.			\$ -	\$ 5,000
2.17	Tie-in to existing Forcemain and Abandon upstream section	L.S.	1	\$ 2,500	\$ 2,500	CrewC11	\$ 8,020	1	\$ 8,020	\$ 10,520
2.18	Allan Block Retaining Wall	sq.m	2	\$ 500	\$ 1,000	CrewC31	\$ 3,064	2	\$ 6,128	\$ 7,128
2.19	Concrete Sidewalk Restoration	ea	28	\$ 250	\$ 7,000	Incl.			\$ -	\$ 7,000
2.20	Concrete Curb & Gutter	Lin.m	30	\$ 150	\$ 4,500	Incl.			\$ -	\$ 4,500
2.21	Asphalt Paving Restoration	sq.m	314	\$ 175	\$ 54,950	Incl.			\$ -	\$ 54,950
2.22	Reinstate Parking & Road markings	L.S.	1	\$ 2,500	\$ 2,500	Incl.			\$ -	\$ 2,500
2.23	Untravelled Surface Restoration	sq.m	140	\$ 55	\$ 7,700	Incl.			\$ -	\$ 7,700
<b>Subtotal and Summary</b>					<b>\$391,800</b>			<b>28</b>	<b>\$78,696</b>	<b>\$470,396</b>
3	Concrete									
3.01	Precast Concrete Wetwell Lid	L.S.	1	\$ 10,310	\$ 10,310	CrewC31	\$ 3,064	2	\$ 6,128	\$ 16,438
3.02	Anchor Block at Forcemain Tie-in	cu.m	12	\$ 1,200	\$ 14,400	Incl.			\$ -	\$ 14,400
3.03	Wetwell Benching	cu.m	4	\$ 1,500	\$ 6,000	Incl.			\$ -	\$ 6,000
3.04	Repair Existing Pipe Penetrations into Wetwell	L.S.	1	\$ 2,000	\$ 2,000	Incl.			\$ -	\$ 2,000
3.05	Concrete pad for Odour Control Unit	cu.m	1	\$ 2,500	\$ 2,500	Incl.			\$ -	\$ 2,500
3.06	Grout fill abandoned A.C. forcemain	cu.m	6	\$ 1,500	\$ 9,000	Incl.			\$ -	\$ 9,000
<b>Subtotal and Summary</b>					<b>\$44,210</b>			<b>2</b>	<b>\$6,128</b>	<b>\$50,338</b>
5	Metals Work and ERP									
5.01	Pipe Supports & Miscellaneous	Allow	1	\$ 5,000	\$ 5,000	Incl.			\$ -	\$ 5,000
5.02	Wetwell Hatch - Double Door, 2200 x 1500, 300PSF, 316SS	ea	1	\$ 38,766	\$ 38,766	Incl.			\$ -	\$ 38,766
5.03	Aluminum Valve & Electrical Kiosk	L.S.	1	\$ 20,000	\$ 20,000	CrewM4	\$ 2,300	1	\$ 2,300	\$ 22,300
<b>Subtotal and Summary</b>					<b>\$63,766</b>			<b>1</b>	<b>\$2,300</b>	<b>\$66,066</b>
6	Coatings & Linings									
9.01	Wetwell - Concrete Surface Preparation	L.S.	1	\$ 2,500	\$ 2,500	CrewS4	\$ 2,740	2	\$ 5,480	\$ 7,980
9.02	Wetwell - Cementitious Coating	sq.m	75	\$ 50	\$ 3,750	CrewS4	\$ 2,740	1	\$ 2,740	\$ 6,490
<b>Subtotal and Summary</b>					<b>\$6,250</b>			<b>3</b>	<b>\$8,220</b>	<b>\$14,470</b>
11	Equipment									
11.01	Odour Control Prowse Lift Station	L.S.	1	\$ 120,841	\$ 120,841	CrewM3	\$ 4,020	3	\$ 12,060	\$ 132,901
<b>Subtotal and Summary</b>					<b>\$120,841</b>			<b>3</b>	<b>\$12,060</b>	<b>\$132,901</b>
15	Mechanical									
15.01	Fabricated 316L Sch 10S Piping	L.S.	1	\$ 47,478	\$ 47,478	CrewM3	\$ 4,020	10	\$ 40,200	\$ 87,678
15.02	400 mm Bonneted, lug style, 316SS Knife Gate Valve c/w stem extension	ea	1	\$ 30,734	\$ 30,734	Incl.			\$ -	\$ 30,734
15.03	200 mm Plug Valve c/w Handwheel	ea	2	\$ 3,022	\$ 6,043	Incl.			\$ -	\$ 6,043
15.04	200 mm Ball Check Valve	ea	2	\$ 2,488	\$ 4,976	Incl.			\$ -	\$ 4,976
15.05	50 mm Sewage Combination Air/Vacuum Valve	ea	1	\$ 2,794	\$ 2,794	Incl.			\$ -	\$ 2,794
15.06	250 mm SS Victaulic Coupling - Flexible	ea	2	\$ 5,029	\$ 10,058	Incl.			\$ -	\$ 10,058
15.07	200 mm SS Victaulic Coupling - Rigid	ea	2	\$ 1,242	\$ 2,483	Incl.			\$ -	\$ 2,483
15.08	100 mm SS Victaulic Coupling - Flexible	ea	1	\$ 416	\$ 416	Incl.			\$ -	\$ 416
15.09	250 mm DI Victaulic Coupling	ea	1	\$ 427	\$ 427	Incl.			\$ -	\$ 427
15.10	200 mm DI Victaulic Coupling	ea	4	\$ 263	\$ 1,051	Incl.			\$ -	\$ 1,051
15.11	PVC Kiosk drain & Air Valve Discharge	L.S.	1	\$ 2,500	\$ 2,500	CrewM4	\$ 2,300	1	\$ 2,300	\$ 4,800
15.12	Replacement Pump Bases c/w new guide rails and lifting chains	ea	2	\$ 4,558	\$ 9,111	CrewM3	\$ 4,020	1	\$ 4,020	\$ 13,131
15.13	Commissioning	L.S.	1	\$ 1,000	\$ 1,000	CrewM3	\$ 4,020	3	\$ 12,060	\$ 13,060
<b>Subtotal and Summary</b>					<b>\$119,070</b>			<b>15</b>	<b>\$58,580</b>	<b>\$177,650</b>
16	Electrical									
16.01	Pressure Transmitter, supply & installation	ea	1	\$ 2,096	\$ 2,096	CrewE2	\$ 1,984	2	\$ 3,968	\$ 6,064
16.02	Submersible Pressure Transmitter, supply and installation	ea	1	\$ 2,573	\$ 2,573	Incl.			\$ -	\$ 2,573
16.03	Ultrasonic Level Transmitter, supply and installation	ea	1	\$ 4,331	\$ 4,331	Incl.			\$ -	\$ 4,331
16.04	Floater Switch, supply & installation	ea	4	\$ 500	\$ 2,000	Incl.			\$ -	\$ 2,000
16.05	Electrical Installation	L.S.	1	\$ 5,000	\$ 5,000	CrewE1	\$ 4,072	5	\$ 20,360	\$ 25,360
<b>Subtotal and Summary</b>					<b>\$16,989</b>			<b>7</b>	<b>\$24,328</b>	<b>\$40,327</b>
17	Additional Construction									
17.01	Additional 216 mm minus road base, supply and placement	tonne	25	\$ 55	\$ 1,375	Incl.			\$ -	\$ 1,375
17.02	Additional Road Subbase, supply and placement	tonne	50	\$ 50	\$ 2,500	Incl.			\$ -	\$ 2,500
17.03	Controlled Density Fill, supply and placement	cu.m	2	\$ 250	\$ 500	Incl.			\$ -	\$ 500
17.04	Trench Overexcavation and Replacement with Drain Rock	cu.m	5	\$ 120	\$ 600	Incl.			\$ -	\$ 600
17.05	Additional concrete sidewalk at 150 mm thickness	sq.m	10	\$ 175	\$ 1,750	Incl.			\$ -	\$ 1,750
17.06	Additional asphalt pavement at 75 mm thickness	sq.m	25	\$ 175	\$ 4,375	Incl.			\$ -	\$ 4,375
17.07	Additional untravelled surface restoration	sq.m	25	\$ 55	\$ 1,375	Incl.			\$ -	\$ 1,375
17.08	Additional Mass Concrete, supply and placement	sq.m	2	\$ 1,000	\$ 2,000	Incl.			\$ -	\$ 2,000
17.09	Crack Repair Wetwell Concrete Interior	lin.m	2	\$ 2,000	\$ 4,000	Incl.			\$ -	\$ 4,000
17.10	Remove & Replace Damaged Wetwell Concrete	1/100 cu.m	50	\$ 100	\$ 5,000	Incl.			\$ -	\$ 5,000
<b>Subtotal and Summary</b>					<b>\$23,476</b>				<b>\$0</b>	<b>\$23,476</b>
<b>SUBTOTAL DIVISIONS 1 TO 17</b>										<b>\$1,093,342</b>
Contingency									15%	\$ 164,001
Contractor Overhead Risk									10%	\$ 109,334
Engineering (Construction Management Services)									0%	\$ -
<b>Class B Capital Cost Opinion</b>										<b>\$1,375,678</b>
This estimate has been based on the pre-design work completed to date and reflects the estimated budget required complete the project.										
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