labor to pull microduct

Backfill Material Cost

Cost of 7way - Micro Duct

Minimum Quantity to order

cost of 7 12.7mm ducts - (~$0.15 each / FT)

Increased Environmental estimate for site visit and research as required

Date: 6/27/2018
Client: City of John Day
Project: John Day Fiber Expansion - Airport / Eagle Peak OPC (Rev#1)

Description	Type	Unit	Labor	Materials	Total Unit	Existing 2" to Airport Qty.	Existing 2" to Airport Total Cost	Aerial Route to Airport Qty.	Aerial Route to Airport Total Cost	Aerial to Eagle Peak Qty.	Aerial to Eagle Peak Total Cost
Underground:											
Trenching - Native B/F	2" PVC	LIN FT	$ 12.00	$ 4.00	$ 16.00	200	$ 3,200.00	750	$ 12,000.00	25	$ 400.00
Trenching - Native B/F	4" PVC	LIN FT	$ 16.00	$ 6.00	$ 22.00		$ -		$ -		$ -
Trenching A/C - Select B/F	2"	LIN FT	$ 22.00	$ 10.00	$ 32.00	2,250	$ 72,000.00		$ -	615	$ 19,680.00
Place Future Path	7-Way 12.7mm	LIN FT	$ -	$ 1.50	$ 1.50	5,000	$ 7,500.00		$ -		$ -
Trenching A/C - CDF B/F	2" PVC	LIN FT	$ 30.00	$ 30.00	$ 60.00		$ -		$ -		$ -
Trenching A/C - CDF B/F	4" PVC	LIN FT	$ 34.00	$ 36.00	$ 70.00		$ -		$ -		
Directional Boring	2" Diameter	LIN FT	$ 16.00	$ 4.00	$ 20.00	100	$ 2,000.00		$ -		
Directional Boring	4" Diameter	LIN FT	$ 20.00	$ 5.00	$ 25.00		$ -		$ -		
Directional Boring A/C	2" Diameter	LIN FT	$ 25.00	$ 7.00	$ 32.00		$ -		$ -		
Directional Boring A/C	4" Diameter	LIN FT	$ 26.00	$ 9.00	$ 35.00		$ -		$ -		$ -
Vault Installation	Utility Vault 444LA	EACH	$ 2,500.00	$ 2,000.00	$ 4,500.00	1	$ 4,500.00	1	$ 4,500.00	1	$ 4,500.00
Hand Hole - Concrete	264 TA	EACH	$ 2,000.00	$ 1,500.00	$ 3,500.00		$ -		$ -		$ -
Hand Hole - Composite	24x36	EACH	$ 1,750.00	$ 875.00	$ 2,625.00	10	$ 26,250.00	2	$ 5,250.00	2	$ 5,250.00
Hand Hole - Composite	17x30	EACH	$ 1,250.00	$ 500.00	$ 1,750.00		$ -		$ -		$ -
Micro-Duct Install in 2"	7 - 12.7mm Micro	LIN FT	$ 5.00	$ 1.50	$ 6.50	3,800	$ 24,700.00		$ -		$ -
Innerduct Installation	4 - 1" SDR13.5	LIN FT	$ 5.00	$ 3.00	$ 8.00		$ -		$ -		$ -
Cable Pulling	exist / new - vacant	LIN FT	$ 2.50	$ 0.50	$ 3.00	6,050	$ 18,150.00	750	$ 2,250.00	640	$ 1,920.00
Cable Pulling	existing - occupied	LIN FT	$ 3.50	$ 0.50	$ 4.00		$ -		$ -		$ -
Rock Trenching Adder	Up to 24" Deep	LIN FT	$ 23.00	$ 2.00	$ 25.00		$ -		$ -		$ -
Rock Boring Adder	Up to 24" Deep	LIN FT	$ 43.00	$ 2.00	$ 45.00		$ -		$ -		$ -
CBD Adder	CBD Urban Premium	LIN FT	$ 125.00	$ 25.00	$ 150.00		$ -		$ -		$ -
					Underground Sub-Total:		**$ 158,300.00**		**$ 24,000.00**		**$ 31,750.00**
Aerial:											
Aerial - New Construction	New Construction	LIN FT	$ 5.00	$ 1.00	$ 6.00	1,150	$ 6,900.00	4,200	$ 25,200.00	15,860	$ 95,160.00
Aerial - Overlash - De/Re	Overlash - De/Re	LIN FT	$ 4.00	$ 0.50	$ 4.50		$ -		$ -		$ -
Aerial - Wreckout	Wreckout	LIN FT	$ 2.00	$ 0.25	$ 2.25		$ -		$ -		$ -
Place Strand	6.6M	LIN FT	$ 3.00	$ 1.00	$ 4.00		$ -		$ -		$ -
Place Riser	2"	EACH	$ 300.00	$ 250.00	$ 550.00		$ -	1	$ 550.00	3	$ 1,650.00
Place Riser	4" w/ 4 - 1.25" ID	EACH	$ 500.00	$ 350.00	$ 850.00	1	$ 850.00		$ -		$ -
Place Pole	30 ft class 5	EACH	$ 1,250.00	$ 850.00	$ 2,100.00		$ -		$ -		$ -
Easement	Private	EACH	$ 2,000.00	$ -	$ 2,000.00		$ -	1	$ 2,000.00	3	$ 6,000.00
Make Ready	Raise-Move-Lower	EACH	$ 250.00	$ 50.00	$ 300.00	3	$ 900.00	5	$ 1,500.00	10	$ 3,000.00
					Aerial Sub-Total:		**$ 8,650.00**		**$ 29,250.00**		**$ 105,810.00**
Facility Connection:											
Building Entry - Aerial Mast	2" GRC w/ WH	EACH	$ 500.00	$ 350.00	$ 850.00		$ -		$ -		$ -
Building Interior Raceway	1-1/4" Flex Conduit	LIN FT	$ 10.00	$ 2.00	$ 12.00	100	$ 1,200.00	100	$ 1,200.00		$ -
Building Interior Raceway	4" EMT	LIN FT	$ 15.00	$ 15.00	$ 30.00		$ -		$ -		$ -
Pull Boxes - NEMA3R	12x12	EACH	$ 125.00	$ 25.00	$ 150.00	1	$ 150.00	1	$ 150.00		$ -
Pull Boxes - NEMA3R	24x24	EACH	$ 250.00	$ 50.00	$ 300.00		$ -		$ -		$ -
Core Drill	2"	EACH	$ 300.00	$ 50.00	$ 350.00	1	$ 350.00	1	$ 350.00		$ -
Core Drill	4"	EACH	$ 500.00	$ 50.00	$ 550.00		$ -		$ -		$ -
Innerduct Installation	3 - 1 1/4" SDR13.5	EACH	$ 2.50	$ 2.00	$ 4.50		$ -		$ -		$ -
Cable Pulling	existing - vacant	LIN FT	$ 2.00	$ 0.50	$ 2.50	100	$ 250.00	100	$ 250.00		$ -
Cable Pulling	existing - occupied	LIN FT	$ 3.00	$ 0.50	$ 3.50		$ -		$ -		$ -
Comm Shelter (POP)	12x20 Pre-Fab	EACH	$ 40,000.00	$ 50,000.00	$ 90,000.00		$ -		$ -		$ -
Generator / Power Supply	5KW / Propane Tank	EACH	$ 10,000.00	$ 30,000.00	$ 40,000.00		$ -		$ -		$ -
Site Prep	Foundation & Site	EACH	$ 10,000.00	$ 10,000.00	$ 20,000.00		$ -		$ -		$ -
					Facility Connection Sub-Total:		$ 1,950.00		$ 1,950.00		$ -
Cable, Splicing and Termination:											
Splicing	Reel End Fusion	EACH	$ 27.00	$ 3.00	$ 30.00	12	$ 360.00	12	$ 360.00	48	$ 1,440.00
Splicing	Splice Case	EACH	$ 250.00	$ 250.00	$ 500.00	1	$ 500.00	1	$ 500.00	2	$ 1,000.00
Splicing	Terminations	EACH	$ 27.00	$ 8.00	$ 35.00	12	$ 420.00	12	$ 420.00	48	$ 1,680.00
Splicing	Bucket Truck Adder	T&M	$ 22.00		$ 22.00		$ -		$ -		$ -
Splicing Technician	$ 80 + $ 40 Truck	T&M	$ 120.00		$ 120.00		$ -		$ -		$ -
Splicing Technician OT	$ 112 + $ 40 Truck	T&M	$ 152.00		$ 152.00		$ -		$ -		$ -
Patch Panels	6F	EACH		$ 150.00	$ 150.00		$ -		$ -		$ -
Patch Panels	12F	EACH		$ 200.00	$ 200.00	1	$ 200.00	1	$ 200.00		$ -
Patch Panels	24F	EACH		$ 250.00	$ 250.00		$ -		$ -		$ -
Patch Panels	48F	EACH		$ 450.00	$ 450.00		$ -		$ -	1	$ 450.00
Patch Panels	72F	EACH		$ 550.00	$ 550.00		$ -		$ -		$ -
Patch Panels	96F	EACH		$ 650.00	$ 650.00		$ -		$ -		$ -
Fiber Cable	6F	EACH		$ 0.50	$ 0.50		$ -		$ -		$ -
Fiber Cable	12F	EACH		$ 0.50	$ 0.50		$ -		$ -		$ -
Fiber Cable	24F	LIN FT		$ 0.65	$ 0.65		$ -		$ -		$ -
Fiber Cable	48F	LIN FT		$ 0.75	$ 0.75		$ -	7,000	$ 5,250.00	21,450	$ 16,087.50
Fiber Cable	72F	LIN FT		$ 1.25	$ 1.25		$ -		$ -		$ -
Fiber Cable	96F	LIN FT		$ 1.50	$ 1.50		$ -		$ -		$ -
Fiber Cable	144F Micro	LIN FT		$ 1.10	$ 1.10	8,000	$ 8,800.00		$ -		$ -
					Cable, Splicing and Termination Sub-Total:		**$ 10,280.00**		**$ 6,730.00**		**$ 20,657.50**
Project Totals by Segment:											
					Underground Section:		**$ 158,300.00**		**$ 24,000.00**		**$ 31,750.00**
Notes:					**Aerial Section:**		**$ 8,650.00**		**$ 29,250.00**		**$ 105,810.00**
					Facility Connection Section:		**$ 1,950.00**		**$ 1,950.00**		**$ -**
					Cable, Splicing and Termination Section:		**$ 10,280.00**		**$ 6,730.00**		**$ 20,657.50**
					All Sections Combined Construction Totals:		**$ 179,180.00**		**$ 61,930.00**		**$ 158,217.50**
					Engineering Cost: Est.		$ 15,000.00		$ 15,000.00		$ 30,000.00
					Environmental Permitting: Est.		$ 5,000.00		$ 2,500.00		$ 5,000.00
					Contingency: 10%		$ 17,918.00		$ 6,193.00		$ 15,821.75
					Prevailing Wage Premium: 15%		$ 26,877.00		$ 9,289.50		$ 23,732.63
Pricing Updated:	October 1, 2017				**Total w/ Engineering & Contingency:**		**$ 243,975.00**		**$ 94,912.50**		**$ 232,771.88**

Total Construction - All Segments:	**$ 399,327.50**
Total Engineering - All Segments:	**$ 60,000.00**
Total Contingency - All Segments:	**$ 39,932.75**
Grand Total - All Segments:	**$ 571,659.38**

The Construction Cost Estimate is an opinion of probable construction costs that may be provided as part of a project. In providing opinions of probable construction cost, it is recognized that neither the Owner nor Commstructure has control over the cost of labor, equipment or materials, or over the Contractor's methods of determining prices or bidding. The opinion of probable construction cost is based on Commstructure's professional judgment and experience and does not constitute a warranty, express or implied, that the Contractor's bids or the negotiated price of the Work described in the Study will not vary from the Owner's budget or from any opinion of probable cost prepared by Commstructure.