Company Name				H and M	Henkels and McCo	у				Future	e Telecom, Inc.		
	Item & Description	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities
						(C)+(D)	(A)x(E)					(C)+(D)	(A)x(E)
Section A	Equipment Racks, and Wire Managers												
A-1	7" CPI relay rack with 19" rails 55053-X03	3	Ea.	170.79	105.26	276.05	828.15	3	Ea.	142.50	175.00	317.50	952.50
A-2	CPI 7'H x 3.65" W VCS Series Veritcal Cable Manager 30161-703	6	Ea.	482.04	26.83	508.87	3,053.22	6	Ea.	400.00	85.00	485.00	2,910.00
A-3	CPI 7'H x 6" W VCS Series Veritcal Cable Manager 30162-703	6	Ea.	536.17	26.83	563.00	3,378.00	6	Ea.	444.00	95.00	539.00	3,234.00
						Totals Section A	7,259.37					Totals Section A	7,096.50
Section B	Systimax G1 / G2 2U Fiber Shelfs & Accessories (refer to section T pg 46)												
B-1	Systimax G2 Shelves - 1U sliding, accommodates 4 G2 Modules- (Labor and Materials) 600G2-1U-MOD-SD	12	Ea.	364.70	0.00	364.70	4,376.40	12	Ea.	287.50	48.00	335.50	4,026.00
B-2	Systimax G2 Shelves - 1U sliding, accommodates 4 G2 Modules- (Labor and Materials) 360G2-1U-MOD-SD	10	Ea.	275.76	0.00	275.76	2,757.60	10	Ea.	217.50	48.00	265.50	2,655.00
B-3	Systimax G2 Shelves - 2U sliding, accommodates 8 G2 Modules- (Labor and Materials) 600G2-2U-MOD-SD	15	Ea.	469.67	0.00	469.67	7,045.05	15	Ea.	372.50	48.00	420.50	6,307.50
B-4	Systimax G2 Shelves - 2U sliding, accommodates 8 G2 Modules- (Labor and Materials) 360G2-2U-MOD-SD	10	Ea.	355.81	0.00	355.81	3,558.10	10	Ea.	282.50	48.00	330.50	3,305.00
B-5	Small Diamater Cable Fitting. Cables OD 0.0725" 600- SRF	27	Ea.	23.41	0.00	23.41	632.07	27	Ea.	20.00	12.00	32.00	864.00
B-6	Mounting Bracket for 23" Frame 600-23BRKT	4	Ea.	18.71				4	Ea.	16.00			
B-7	Rear Fiber Management Kit FOC-MGMT-KIT	27	Ea.	204.59			-7	27	Ea.	N/A		0.00	
B-8 B-9	Rear Mounted Bracket for Six 1/2"Glands RMB-6-1/2 Rear Mounted Bracket for six 3/8"Glands RMB-6-3/8	12 12	Ea. Ea.	38.24 30.24				12 12	Ea. Ea.	32.50 25.50	16.00 16.00		
B-10	Rear Mounted Bracket for five 3/4"Glands RMB-5-3/4	12	Ea.	30.24				12	Ea.	25.50			
B-11	Faceplate, G2 1U Shelf, Accepts 4 G2 Modular Cassettes 600G2-1U-UP	12	Ea.	314.89	0.00	314.89	3,778.68	12	Ea.	41.50	18.00	59.50	714.00
B-12	Faceplate, G2 1U Shelf, Accepts 4 G2 Modular Cassettes 360G2-1U-UP	10	Ea.	240.17	0.00	240.17	7 2,401.70	10	Ea.	41.50	18.00	59.50	595.00
B-13	Kit, includes 2 Fiber Drums and Installation Hardware 600G2-Fiber Drum Kit	27	Ea.	18.71	0.00	18.71	505.17	27	Ea.	16.00	12.00	28.00	756.00
B-14	Kit, includes 2 Fiber Drums and Installation Hardware 360G2-Fiber Drum Kit	10	Ea.	18.71	0.00	18.71	187.10	10	Ea.	16.00	12.00	28.00	280.00
B-15	Plexiglass Cover for G1 and G2 Shelves	27	Ea.	30.07	0.00	30.07	811.89	27	Ea.	32.50	12.50	45.00	1,215.00
B-16	Fusion Splice Trays, 16 Splices per Tray, Pack of 10 1AMF1-16LG	10	Ea.	112.37	0.00	112.37	7 1,123.70	10	Ea.	95.00	16.00	111.00	1,110.00
B-17	Mass Fusion Splice Tray, 6 Splices per Tray, Pack of 10 1AMF1-6LG	10	Ea.	96.60	0.00	96.60	966.00	10	Ea.	250.00	16.00	266.00	2,660.00
B-18	Fusion Splice Sleeves 60MM (Pkg of 50)	10	Ea.	56.43	0.00	56.43	3 564.30	10	Ea.	40.00	25.00	65.00	650.00
B-19	Fusion Splice Sleeves 40MM (Pkg of 50)	10	Pkg.	59.44	0.00			10	Pkg.	30.00	25.00		
Section C	Systimax G2 4U Fiber Shelves & Accessories (refer to section U pg 46)					Totals Section E	30,005.57					Totals Section E	21,401.50
C-1	Systimax 1000G2 4U Sliding Modular Cassette Shelf, accepts 12 MODG2 Cassettes 1000G2-4U-M0D-SD	8	Ea.	837.93	0.00	837.93	6,703.44	8	Ea.	665.00	75.00	740.00	5,920.00
C-2	Systimax 360G2 4U Sliding Modular Cassette Shelf, accepts 12 MODG2 Cassettes 360G2-4U-M0D-SD	10	Ea.	622.67				10	Ea.	500.00			
C-3	Cable Protector Kit for 4U G2 Shelf 1000G2-CPB	16	Ea.	247.57				16	Ea.	210.00			·
C-4	Expanded Cable Protector Kit for 4U G2 Shelf 1000G2-XCPB	8	Ea.	41.94		41.94		8	Ea.	36.00			
C-5	Smoked Front Door, 4U G2 Shelf 1000G2-SFDA	8	Ea.	39.14	0.00	39.14	313.12	8	Ea.	32.50	12.00	44.50	356.00

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C-6	Shelf Mounted Bracket for Eight 1/2" Cable Glands SMB-8-1/2	16	Ea.	95.43	0.00	95.43	1,526.88	16	Ea.	80.00	20.00	100.00	1,600.00
C-7	Shelf Mounted Bracket for Four 3/4" Cable Glands SMB-4-3/4	16	Ea.	47.71	0.00	47.71 Totals Section C		16	Ea.	40.00	20.00	60.00 Totals Section C	960.00 19,386.00
Section D	G2 Modular Cassettes (refer to section V pg 47)						.,,,,,,						
D-1	G2 "A" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard MODG2- 6SC-SM-PT-A-4MSU	100	Ea.	189.47	0.00	189.47	18,947.00	100	Ea.	150.00	18.00	168.00	16,800.00
D-2	G2 "A" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard 360G2 cartridge 6-SC-SM-BL pigtails A	100	Ea.	169.01	0.00	169.01	16,901.00	100	Ea.	150.00	18.00	168.00	16,800.00
D-3	G2 "A" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard 360G2 cartridge 6-LC-SM-BL pigtails A	5	Ea.	329.13	0.00	329.13	1,645.65	5	Ea.	150.00	18.00	168.00	840.00
D-4	G2 "B" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard MODG2- 6SC-SM-PT-B-4MSU	5	Ea.	221.49	0.00	221.49	1,107.45	5	Ea.	150.00	18.00	168.00	840.00
D-5	G2 "B" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard 360G2 cartridge 6-SC-SM-BL pigtails B	10	Ea.	169.01	0.00	169.01	1,690.10	10	Ea.	150.00	18.00	168.00	1,680.00
D-6	G2 "B" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard 360G2 cartridge 6-LC-SM-BL pigtails B	5	Ea.	329.13	0.00			5	Ea.	150.00	18.00		840.00
						Totals Section D	41,936.85					Totals Section D	37,800.00
Section E	Systimax Outside Plant Fiber Optic Cable (see attachment Q)												
E-1	Systimax TeraSPEED Lt. Armored Fiber Optic- 12 (Materials & labor pulling through duct) D-012-LA-XY-FZZNS	2,000	Ft.	0.45	0.60	1.05	2,100.00	2,000	Ft.	0.60	1.00	1.60	3,200.00
E-2	Systimax TeraSPEED Lt. ArmoredFiber Optic- 24 (Materials & labor pulling through duct) D-024-LA-XY-FZZNS	2,000	Ft.	0.58	0.60	1.18	2,360.00	2,000	Ft.	0.60	1.00	1.60	3,200.00
E-3	Systimax TeraSPEED Lt. ArmoredFiber Optic- 36 (Materials & labor pulling through duct) D-036-LA-XY-FZZNS	40,000	Ft.	0.83	0.60	1.43	57,200.00	40,000	Ft.	0.80	1.00	1.80	72,000.00
E-4	Systimax TeraSPEED Lt. ArmoredFiber Optic- 48 (Materials & labor pulling through duct) D-048-LA-XY-FZZNS	70,000	Ft.	0.95	0.60	1.55	108,500.00	70,000	Ft.	0.95	1.00	1.95	136,500.00
E-5	Systimax TeraSPEED Lt. ArmoredFiber Optic- 60 (Materials & labor pulling through duct) D-060-LA-XY-FZZNS	2,000	Ft.	1.10	0.60	1.70	3,400.00	2,000	Ft.	1.15	1.00	2.15	4,300.00
E-6	Systimax TeraSPEED Lt. ArmoredFiber Optic- 72 (Materials & labor pulling through duct) D-072-LA-XY-FZZNS	10,000	Ft.	1.16	0.60	1.76	17,600.00	10,000	Ft.	1.20	1.00	2.20	22,000.00
E-7	Systimax TeraSPEED Lt. ArmoredFiber Optic- 84 (Materials & labor pulling through duct) D-084-LA-XY-FZZNS	12,000	Ft.	1.51	0.60	2.11	25,320.00	12,000	Ft.	1.55	1.00	2.55	30,600.00
E-8	Systimax TeraSPEED Lt. ArmoredFiber Optic- 96 (Materials & labor pulling through duct) D-096-LA-XY-FZZNS	10,000	Ft.	1.82	0.60	2.42	24,200.00	10,000	Ft.	1.80	1.00	2.80	28,000.00
E-9	Systimax TeraSPEED Lt. ArmoredFiber Optic- 108 (Materials & labor pulling through duct) D-108-LA-XY-FZZNS	2,000	Ft.	2.34	0.60	2.94	5,880.00	2,000	Ft.	2.00	1.00	3.00	6,000.00
E-10	Systimax TeraSPEED Lt. ArmoredFiber Optic- 120 (Materials & labor pulling through duct) D-120-LA-XY-FZZNS	2,000	Ft.	2.53	0.60	3.13	6,260.00	2,000	Ft.	2.00	1.00	3.00	6,000.00
E-11	Systimax TeraSPEED Lt. ArmoredFiber Optic- 132 (Materials & labor pulling through duct) D-132-LA-XY-FZZNS	5,000	Ft.	2.79	0.60	3.39	16,950.00	5,000	Ft.	2.30	1.00	3.30	16,500.00

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E-12	Systimax TeraSPEED Lt. ArmoredFiber Optic- 156 (Materials & labor pulling through duct) D-156-LA-XY-FZZNS	2,000	Ft.	3.92	0.60	4.52	9,040.00	2,000	Ft.	2.50	1.00	3.50	7,000.00
	Systimax TeraSPEED Lt. ArmoredFiber Optic- 168 (Materials & labor pulling through duct) D-168-LA-XY-FZZNS	•											3,222.0
E-13	Systimax TeraSPEED Lt. ArmoredFiber Optic- 180 (Materials & labor	2,000	Ft.	4.11	0.60	4.71	9,420.00	2,000	Ft.	2.65	1.00	3.65	7,300.00
E-14	pulling through duct) D-180-LA-XY-FZZNS Systimax TeraSPEED Lt. ArmoredFiber Optic - 228 (Materials & labor	2,000	Ft.	4.28	0.60	4.88	9,760.00	2,000	Ft.	2.90	1.00	3.90	7,800.00
E-15	pulling through duct) D-228-LA-XY-FZZNS	2,000	Ft.	4.46	0.60	5.06	10,120.00	2,000	Ft.	3.60	1.25	4.85	9,700.00
E-16	Systimax TeraSPEED Lt. ArmoredFiber Optic- 252 (Materials & labor pulling through duct) D-252-LA-XY-FZZNS	5,000	Ft.	4.81	0.60		,	5,000	Ft.	3.85	1.25		
Section F	Inside Building Duct (refer to section K thru S /pg 41 thru 45)					Totals Section E	335,160.00					Totals Section E	385,600.00
F-1	10' x 2" EMT Duct Threaded Include supporting hardware such as all- thread (Labor and Material)	1,000	Ft.	4.13	2.53	6.66	6,660.00	1,000	Ft.	4.90	16.00	20.90	20,900.00
F-2	2" EMT 30 degree bend Threaded - Include supporting hardware (Labor and Material)	20	Ea.	40.25	14.45	54.70	1,094.00	20	Ea.	19.20	32.00	51.20	1,024.00
F-3	EMT 45 degree bend Threaded - Include supporting hardware (Labor and Material) EMT 90 degree bend Threaded - Include supporting hardware (Labor and Charles)	20	Ea.	40.25	14.45	54.70	1,094.00	20	Ea.	19.20	32.00	51.20	1,024.00
F-4 F-5	Material) 10' x 4" EMT Duct Threaded Include supporting hardware such as all-thread (Labor and Material)	20 300	Ea. Ft.	42.31 9.80		67.08		20 300	Ea. Ft.	24.40 9.20			1,448.00 9,960.00
F-6	4" EMT 30 degree bend Threaded - Include supporting hardware (Labor and Material)	14	Ea.	113.52		138.29	·	14	Ea.	48.00			
F-7	4" EMT 45 degree bend Threaded - Include supporting hardware (Labor and Material)	14	Ea.	113.52	24.77	138.29	1,936.06	14	Ea.	48.00	48.00	96.00	1,344.00
F-8	4" EMT 90 degree bend Threaded - Include supporting hardware (Labor and Material) 10' x 2" IMC Duct Threaded Include supporting hardware such as all-thread	14	Ea.	113.52	37.15	150.67	2,109.38	14	Ea.	80.00	88.00	168.00	2,352.00
F-9	(Labor and Material) 2" IMC 30 degree bend Threaded - Include supporting hardware (Labor and	14	Ft.	5.47				14	Ft.	9.50			
F-10 F-11	Material) 2" IMC 45 degree bend Threaded - Include supporting hardware (Labor and Material)	20	Ea.	46.44 46.44				20	Ea. Ea.	45.00 45.00			
F-12	2" IMC 90 degree bend Threaded - Include supporting hardware (Labor and Material)	20	Ea.	46.44				20	Ea.	65.00			,,,,,,,
F-13	10' x 4" IMC Duct Threaded Include supporting hardware such as all-thread (Labor and Material)	300	Ft.	17.03	8.77	25.80	7,740.00	300	Ft.	16.20	26.00	42.20	12,660.00
F-14	4" IMC 30 degree bend Threaded - Include supporting hardware (Labor and Material)	14	Ea.	137.26	30.96	168.22	2,355.08	14	Ea.	68.00	54.00	122.00	1,708.00
F-15	4" IMC 45 degree bend Threaded - Include supporting hardware (Labor and Material)	14	Ea.	137.26	30.96	168.22	2,355.08	14	Ea.	68.00	54.00	122.00	1,708.00
F-16	IMC 90 degree bend Threaded - Include supporting hardware (Labor and Material) 10' x 2" RMC Duct Threaded Include supporting hardware such as all-	14	Ea.	137.26	49.54	186.80		14	Ea.	108.00			
F-17 F-18	thread (Labor and Material) 2" RMC 30 degree bend Threaded - Include supporting hardware (Labor	1,000	Ft.	11.61 85.66				1,000	Ft. Ea.	8.40 88.00			
F-18 F-19	and Material) 2" RMC 45 degree bend Threaded - Include supporting hardware (Labor and Material)	20	Ea.	85.66 85.66			,	20	Ea.	88.00 88.00			2,480.00 2,480.00
F-20	2" RMC 90 degree bend Threaded - Include supporting hardware (Labor and Material)	20	Ea.	85.66				20	Ea.	128.00	55.00	183.00	3,660.00
F-21	10' x 4" RMC Duct Threaded Include supporting hardware such as all- thread (Labor and Material)	1,000	Ft.	21.93	10.53	32.46	32,460.00	1,000	Ft.	13.40	24.00	37.40	37,400.00

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F-22	4" RMC 30 degree bend Threaded - Include supporting hardware (Labor and Material)	20	Ea.	100.10	49.54	149.64	2,992.80	20	Ea.	128.00	48.00	176.00	3,520.00
F-23	4" RMC 45 degree bend Threaded - Include supporting hardware (Labor and Material)	20	Ea.	100.10	49.54	149.64	2,992.80	20	Ea.	148.00	48.00	196.00	3,920.00
F-24	4" RMC 90 degree bend Threaded - Include supporting hardware (Labor and Material)	20	Ea.	100.10	68.11	168.21	3,364.20	20	Ea.	288.00	144.00	432.00	8,640.00
F-25	2" Core Drill through 1" to 6" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	20	Ea.	34.06	165.12	199.18	3,983.60	20	Ea.	48.00	150.00	198.00	3,960.00
F-26	2" Core Drill through 6" to 12" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	20	Ea.	34.06	216.72	250.78	5,015.60	20	Ea.	68.00	250.00	318.00	6,360.00
F-27	2" Core Drill through 12" to 18" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	10	Ea.	34.06	294.12	328.18	3,281.80	10	Ea.	88.00	350.00	438.00	4,380.00
F-28	4" Core Drill through 1" to 6" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	10	Ea.	67.08	232.20	299.28	2,992.80	10	Ea.	78.00	250.00	328.00	3,280.00
F-29	4" Core Drill through 6" to 12" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	10	Ea.	67.08	304.44	371.52	3,715.20	10	Ea.	98.00	350.00	448.00	4,480.00
F-30	4" Core Drill through 12" to 18" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	5	Ea.	67.08	361.20	428.28	2,141.40	5	Ea.	148.00	500.00	648.00	3,240.00
F-31	6" Core Drill through 1" to 6" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	5	Ea.	70.18	304.44	374.62	1,873.10	5	Ea.	108.00	350.00	458.00	2,290.00
F-32	6" Core Drill through 6" to 12" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	5	Ea.	70.18	361.20	431.38	2,156.90	5	Ea.	128.00	450.00	578.00	2,890.00
F-33	6" Core Drill through 12" to 18" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)	5	Ea.	70.18	500.52	570.70	2,853.50	5	Ea.	178.00	600.00	778.00	3,890.00
F-34	2" holesaw through metal (wall, NEMA Boxes, etc.)(Labor Only)	20	Ea.	5.16	24.77	29.93	598.60	20	Ea.		20.00	20.00	400.00
F-35	4" holesaw through metal (wall, NEMA Boxes, etc.)(Labor Only)	10	Ea.	10.32	37.15	47.47	474.70	10	Ea.		40.00	40.00	400.00
F-36	6" holesaw through metal (wall, NEMA Boxes, etc.)(Labor Only)	5	Ea.	15.48	53.66	69.14 Totals Section F		5	Ea.		65.00	65.00 Totals Section F	325.00 193,764.00
Section G	Outside Plant Duct (see attachment R for items G-8 thru G-15)												
G-1	4"W x 10' L Steel Casing (Material and Installed)	500	Ft.	5.26	22.29	27.55		500	Ft.	8.00	14.00		11,000.00
G-2	6"W x 10' L Steel Casing (Material and Installed)	500	Ft.	12.57	24.77	37.34		500	Ft.	14.00	20.00		17,000.00
G-3	10"W x 10' L Steel Casing (Material and Installed)	1,000	Ft.	17.71	34.68	52.39		1,000	Ft.	36.00	60.00		96,000.00
G-4	24"W x 10' L Steel Casing (Material and Installed)	1,000	Ft.	54.86	68.11	122.97	122,970.00	1,000	Ft.			0.00	
G-5 G-6	30°W x 10°L Steel Casing (Material and Installed) 10° x2° RMC Duct Threaded Include wall mount (1) 12 inch unistrut mounted to wall with (2) single pipe straps for 2 inch RMC hardware (Typical Installation is from NEMA Box to Ground)	1,000	Ft.	107.99	99.07	207.06		1,000	Ft.	8.45	16.00	0.00	0.00 24,450.00
G-7	10" x 4" RMC Duct Threaded Include wall mount (1) 12 inch unistrut mounted to wall with (2) single pipe straps for 2 inch RMC hardware (Typical Installation is from NEMA Box to Ground)	400	Ft.	14.61	12.38	26.99		400	Ft.	8.40	18.00		10,560.00
G-8	10' x 2" RMC Duct Threaded Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing)	800	Ft.	7.43	30.96	38.39	30,712.00	800	Ft.	16.75	25.00	41.75	33,400.00
G-9	2" RMC 30 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing)	10	Ea.	40.87	18.58	59.45	594.50	10	Ea.	88.00	36.00	124.00	1,240.00

Company Name				H and M Her	nkels and McCo	у				Future	e Telecom, Inc.		
	Item & Description	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All L Componets)	(D) abor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities
G-10	2" RMC 45 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing)	10	Ea.	40.87	18.58	59.45	594.50	10	Ea.	88.00	36.00	124.00	1,240.00
G-11	2" RMC 90 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing)	10	Ea.	40.87	18.58	59.45	594.50	10	Ea.	128.00	55.00	183.00	1,830.00
G-12	10' x 4" RMC Duct Threaded Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing)	800	Ft.	16.10	37.15	53.25	42,600.00	800	Ft.	19.50	32.00	51.50	41,200.00
G-13	4" RMC 30 degree bend Threaded -Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing)	10	Ea.	101.55	30.96	132.51	1,325.10	10	Ea.	128.00	60.00	188.00	1,880.00
G-14	4" RMC 45 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing)	10	Ea.	101.55	30.96	132.51	1,325.10	10	Ea.	148.00	60.00	208.00	2,080.00
G-15	4" RMC 90 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing)	10	Ea.	101.55	30.96	132.51	1,325.10	10	Ea.	288.00	180.00	468.00	4,680.00
						Totals Section G	477,249.80					Totals Section G	246,560.00
Section H	Outside Plant Hand Holes (see attachment I, J, K, & L)												
H-1	24"W x 36"L x 48" Deep Poly Concrete w/ single 20K Traffic Lid w/Open Bottom. All hand holes must include racking hardware, 12" cable brackets (4 Min.), Grounding lugs, Grounding rods. All lids must have "Carland ISD Fiber Optic Cable" inscribed from the manufacturer on the lid. Newbasis or Old Castle is the preferred manufacturer (Labor and Materials)	40	Ea.	883.46	247.68	1,131.14	45,245.60	40	Ea.	695.00	750.00	1,445.00	57,800.00
H-2	30"W x 48"L x 48" Deep Poly Concrete w/ dual 20K Traffic Lids w/Open Bottom. All hand holes must include racking hardware, 12" cable brackets (4 Min.), Grounding lugs, Grounding rods. All lids must have "Garland ISD Fiber Optic Cable" inscribed from the manufacturer on the lid. Newbasis or Old Castle is the preferred manufacturer (Labor and Materials)	25	Ea.	1,103.40	371.52	1,474.92	36,873.00	25	Ea.	1,050.00	850.00	1,900.00	47,500.00
	30"W x 48"L x 36" Deep Poly Concrete w/ dual 20K Traffic Lids w/Open Bottom. All hand holes must include racking hardware, 12" cable brackets (4 Min.), Grounding lugs, Grounding rods. All lids must have "Garland ISD Fiber Optic Cable" inscribed from the manufacturer on the lid. Newbasis or												
H-3	Old Castle is the preferred manufacturer (Labor and Materials) 36"W x 60"L x 36" Deep Poly Concrete w/ dual 20K Traffic Lids w/Open Bottom. All hand holes must include racking hardware, 12" cable brackets (4 Min.), Grounding lugs, Grounding rods. All lids must have "Garland ISD Fiber Optic Cable" inscribed from the manufacturer on the lid. Newbasis or	20	Ea.	913.53	247.68	1,161.21			Ea.	850.00	700.00		
H-4	Old Castle is the preferred manufacturer (Labor and Materials)	25	Ea.	1,428.60	476.78	1,905.38 Totals Section H	1	25	Ea.	1,250.00	850.00	2,100.00 Totals Section H	
Section I	Splice Cases Outside Plant (Preformed COYOTE Only) All splice cases are to include all miscellaneous materials such as endplates, Grommett kits, minimum of 1 - 36 strand fusion splice tray, fusion splice sleeves, cement, sealant tape, bonding and grounding (refer to section Z pg 49)												
I-1	Coyote Splice Closure - 6" x 22", capacity 4-36 tray, 144 fiberPreformed 8006560	20	Ea.	419.51	0.00	419.51	8,390.20	20	Ea.	380.00	200.00	580.00	11,600.00
I-2	Coyote Splice Closure - 8.5" x 22" , capacity 4-36 tray, 144 fiberPreformed 8006561	10	Ea.	738.87	0.00	738.87	7,388.70	10	Ea.	755.00	280.00	1,035.00	10,350.00
I-3	Preformed Single fusion splice tray - 36 80805110	30	Ea.	47.61	0.00	47.61	1,428.30	30	Ea.	52.50	15.00	· · · · · · · · · · · · · · · · · · ·	
1-4	Coyote Dome Closure - Preformed - 9.5" x 28" for Loose Buffer Cables 80061055	5	Ea.	567.19	0.00	567.19	2,835.95	5	Ea.	490.00	240.00	730.00	3,650.00
I-5	Coyote Dome Closure - Preformed - 6.5" x 22" for Loose Buffer Cables 8006877	17	Ea.	399.53	0.00	399.53	6,792.01	17	Ea.	360.00	180.00	540.00	9,180.00
I-6	Coyote Dome Closure - Preformed - 6.5" x17" for Loose Buffer Cables 8006944	5	Ea.	249.51	0.00	249.51		5	Ea.	225.00	120.00		
I-7	Corning Splice Sleeves 2806031-01Pkg. Of 50	20	Pkg.	61.33	0.00		,	20	Pkg.	47.50	50.00		
I-8	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 12 to 24 Strands	10	Ea. Group	0.00	2,331.40	2,331.40	23,314.00	10	Ea. Group		1,800.00	1,800.00	18,000.00

Company Name				H and M Henkels a	and McCoy	,				Future	Telecom, Inc.		
	Item & Description	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material (IC Cost Per Unit (All Componets) Ur		(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities
I-9	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 24 to 36 Strands	10	Ea. Group	0.00	2,571.40	2,571.40	25,714.00	10	Ea. Group		1,980.00	1,980.00	19,800.00
I-10	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 37 to 48 Strands	15	Ea. Group	0.00	2,811.40	2,811.40	42,171.00	15	Ea. Group		2,165.00	2,165.00	32,475.00
I-11	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 49 to 72 Strands	6	Ea. Group	0.00	3,805.70	3,805.70	22,834.20	6	Ea. Group		2,930.00	2,930.00	17,580.00
I-12	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 73 to 84 Strands	6	Ea. Group	0.00	4,320.00	4,320.00	25,920.00	6	Ea. Group		3,326.00	3,326.00	19,956.00
I-13	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 85 to 96 Strands	6	Ea. Group	0.00	4,800.00	4,800.00	28,800.00	6	Ea. Group		3,696.00	3,696.00	22,176.00
I-14	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 97 to 108 Strands	6	Ea. Group	0.00	5,245.70	5,245.70	31,474.20	6	Ea. Group		4,040.00	4,040.00	24,240.00
I-15	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 109 to 120 Strands	6	Ea. Group	0.00	5,271.40	5,271.40		6	Ea. Group		4.356.00	4.356.00	26,136.00
I-16	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 121 to 132 Strands	6	Ea. Group		6,034.30	6,034.30	·	6	Ea. Group		4,646.00	4,646.00	27,876.00
I-17	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 133 to 156 Strands	6	Ea. Group		6,908.60	6,908.60		6	Ea. Group		5,320.00	5,320.00	31,920.00
I-18	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 157 to 168 Strands	4	Ea. Group		7,200.00	7,200.00		4	Ea. Group		5,544.00	5,544.00	22,176.00
	Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 169 to 180				-		·						
I-19	Strands Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 181 to 228	4	Ea. Group		7,457.10	7,457.10		4	Ea. Group		5,742.00	5,742.00	22,968.00
I-20	Strands Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 229 to 252	2	Ea. Group		8,794.30	8,794.30	,,,,,,	2	Ea. Group		6,770.00		13,540.00
I-21	Strands	2	Ea. Group	0.00	9,360.00	9,360.00	18,720.00	2	Ea. Group		7,200.00		14,400.00
I-22	New Splice Preparation Fusion Splice - 12 to 24 Strands	10	Ea. Group	0.00	114.29	114.29	1,142.90	10	Ea. Group		92.00	92.00	920.00
I-23	New Splice Preparation Fusion Splice - 24 to 36 Strands	10	Ea. Group	0.00	137.14	137.14	1,371.40	10	Ea. Group		110.00	110.00	1,100.00
1-24	New Splice Preparation Fusion Splice - 37 to 48 Strands	15	Ea. Group	0.00	160.00	160.00	2,400.00	15	Ea. Group		128.00	128.00	1,920.00
I-25	New Splice Preparation Fusion Splice - 49 to 72 Strands	6	Ea. Group	0.00	205.71	205.71	1,234.26	6	Ea. Group		166.00	166.00	996.00
I-26	New Splice Preparation Fusion Splice - 73 to 84 Strands	6	Ea. Group	0.00	228.57	228.57	1,371.42	6	Ea. Group		184.00	184.00	1,104.00
I-27	New Splice Preparation Fusion Splice - 85 to 96 Strands	6	Ea. Group	0.00	251.43	251.43	1,508.58	6	Ea. Group		200.00	200.00	1,200.00
I-28	New Splice Preparation Fusion Splice - 97 to 108 Strands	6	Ea. Group	0.00	274.29	274.29	1,645.74	6	Ea. Group		220.00	220.00	1,320.00
1-29	New Splice Preparation Fusion Splice - 109 to 120 Strands	6	Ea. Group	0.00	297.14	297.14	1,782.84	6	Ea. Group		240.00	240.00	1,440.00
1-30	New Splice Preparation Fusion Splice - 121 to 132 Strands	6	Ea. Group	0.00	320.00	320.00	1,920.00	6	Ea. Group		258.00	258.00	1,548.00
I-31	New Splice Preparation Fusion Splice - 133 to 156 Strands	6	Ea. Group	0.00	342.86	342.86	2,057.16	6	Ea. Group		276.00	276.00	1,656.00
I-32	New Splice Preparation Fusion Splice - 157 to 168 Strands	4	Ea. Group	0.00	365.71	365.71	1,462.84	4	Ea. Group		294.00	294.00	1,176.00
I-33	New Splice Preparation Fusion Splice - 169 to 180 Strands	4	Ea. Group	0.00	388.57	388.57	1,554.28	4	Ea. Group		312.00	312.00	1,248.00
1-34	New Splice Preparation Fusion Splice- 181 to 228 Strands	2	Ea. Group	0.00	480.00	480.00	960.00	2	Ea. Group		386.00	386.00	772.00
I-35	New Splice Preparation Fusion Splice - 229 to 252 Strands	2	Ea. Group	0.00	525.71	525.71	1,051.42	2	Ea. Group		424.00	424.00	848.00
I-36 I-37	Splice Case Open & Closure Cost OTDR Test and Documentation Only 36 Strand Groups	15 20	Ea. Ea.	0.00	250.00 928.57	250.00 928.57	3,750.00	15 20	Ea. Ea.		200.00 750.00	200.00 750.00	3,000.00 15.000.00
I-37	PLP 36 count low profile splice tray (part number 80808289)	20	Ea.	56.36	0.00	928.57 56.36		20	Ea.		750.00 45.00	25.00	500.00
1-39	PLP 9.5X28 deluxe coyote stainless steel splice closure /buffer tube (part number 8006627)	20	Ea.	943.69	0.00	943.69	18,873.80	20	Ea.		700.00	500.00	10.000.00
. 55		10		0.10.00	0.00	Totals Section I	497,544.75				700.00	Totals Section I	399,471.00
Section J	Outside Plant Miscelaneous Items												

Company Name				H and M Henkels and Mo	Соу				Future	Telecom, Inc.		
	Item & Description	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material (D) Cost Per Unit (All Componets) Labor Cost P	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities
J-1	# 6 AWG Green Insulated Ground Wire Pulled through duct. Provide hardware on each end for grounding - do not include BusBar in this cost (labor and material) per foot installed.	1,000	Ft	0.67	.12 0.7	9 790.00	1,000	Ft	0.75	0.60	1.35	1,350.00
J-1	# 10 AWG Green Insulated Ground Wire Pulled through duct. Provide hardware on each end for grounding - do not include BusBar in this cost (labor and material) per foot installed.	1,000	Ft		.11 0.4		1,000	Ft	0.75	0.60	0.80	1,350.00
J-3	#12 AWG Green Insulated Ground Wire Pulled through duct. Provide hardware on each end for grounding - do not include BusBar in this cost (labor and material) per foot installed.	500	Ft	0.16	.10 0.2	6 130.00	500	Ft	0.25	0.45	0.70	350.00
J-4	The Flush Fink® cathodic protection test station and terminal enclosure	50	Ea.	122.24 30	.96 153.2	7,660.00	50	Ea.	60.00	85.00	145.00	7,250.00
J-5	1,800 pound test mule tape installed in duct (per Foot)	50,000	Ft	0.09	.12 0.2	1 10,500.00	50,000	Ft	0.10	0.15	0.25	12,500.00
J-6	12"H x 12" W x 8" Deep NEMA Enclosure Weatherproof mounted and sealed - should include threaded hardware for securing duct that will be terminated in the box (Labor and Material)	30	Ea.	60.25 92	.88 153.1	3 4,593.90	30	Ea.	85.00	125.00	210.00	6,300.00
J-7	NEMA-rated metallic pull boxes 18"x 18"x 6", (for inside building)	15	Ea.	65.91 52	.63 118.5	4 1,778.10	15	Ea.	120.00	125.00	245.00	3,675.00
J-8	Pull String - jet line (labor and materials)	10,000	Ft		.07 0.0		10,000	Ft	0.02	0.13		1,500.00
J-9	(2) single pipe straps for 2 inch RMC	500	Ft		.19 12.3	-,	500	Ft	8.40	22.00	30.40	15,200.00
J-10	Cable Support Brackets (Steps) (Hand Hole)	100	Ea.		.19 11.5		100	Ea.	8.25	11.00	19.25	1,925.00
J-11 J-12	Cable Support Racks w/mounting hardware Orange Curb marker 2.5" crystal cap, UV resistant, include Ultra violet resistant (see attachment ???)	100 500	Ft Ea.		.19 8.7		100 500	Ft Ea.	19.50	20.00	39.50 16.75	3,950.00 8,375.00
J-13	Locating Flags (see attachment S)	6,000	Ea.		.00 0.0		6,000	Ea.	0.15	0.15		1,800.00
					Totals Section	40,878.00					Totals Section J	64,975.00
Section K	Outside Plant Duct Installation Costs (refer to section A thru I /pg 35 thru 40 Directional Boring Operations)											
K-1	Bore and install 1 - 1.25" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	0.76	.43 8.1	9 8,190.00	1,000	Ft.	0.60	12.50	13.10	13,100.00
K-2	Bore and install 1 - 1.25" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	2,000	Ft.	0.76	.43 8.1	9 16,380.00	2,000	Ft.	0.60	11.50	12.10	24,200.00
K-3	Bore and install 2 - 1.25" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	1.54	.67 10.2	1 10,210.00	1,000	Ft.	1.20	13.00	14.20	14,200.00
K-4	Bore and install 2 - 1.25" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	2,000	Ft.	1.54 8	.67 10.2	1 20,420.00	2,000	Ft.	1.20	12.00	13.20	26,400.00
K-5	Bore and install 1 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	0.97	.43 8.4	8,400.00	1,000	Ft.	0.70	12.50	13.20	13,200.00
K-6	Bore and install 1 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	5,000	Ft.	0.97	.43 8.4	42,000.00	5,000	Ft.	0.70	11.50	12.20	61,000.00
K-7	Bore and install 2 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	1.93	.67 10.6	10,600.00	1,000	Ft.	1.40	13.00	14.40	14,400.00
K-8	Bore and install 2 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	5,000	Ft.	1.93	.67 10.6	53,000.00	5,000	Ft.	1.40	12.00	13.40	67,000.00
K-9	Bore and install 3 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	2.90	.60 12.5	12,500.00	1,000	Ft.	2.10	15.00	17.10	17,100.00
K-10	Bore and install 3 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	2,000	Ft.	2.90	.60 12.5	25,000.00	2,000	Ft.	2.10	14.00	16.10	32,200.00
K-11	Bore and install 4 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	3.86 10	.53 14.3	9 14,390.00	1,000	Ft.	2.80	18.00	20.80	20,800.00
K-12	Bore and install 4 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	2,000	Ft.	3.86 10	.53 14.3	9 28,780.00	2,000	Ft.	2.80	17.00	19.80	39,600.00
K-13	Bore and install 1 - 2" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	1.36	.43 8.7	9 8,790.00	1,000	Ft.	1.00	12.50	13.50	13,500.00
K-14	Bore and install 1 - 2" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	3,000	Ft.	1.36	.43 8.7	9 26,370.00	3,000	Ft.	1.00	11.50	12.50	37,500.00
K-15	Bore and install 2 - 2" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	2.72	.67 11.3	9 11,390.00	1,000	Ft.	2.00	18.00	20.00	20,000.00
K16	Bore and install 2 - 2" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	5,000	Ft.	2.72	.67 11.3	9 56,950.00	5,000	Ft.	2.00	17.00	19.00	95,000.00
K-17	Bore and install 1 - 4" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	4.57	.91 14.4	B 14,480.00	1,000	Ft.	3.50	15.00	18.50	18,500.00

ompany Name				H and M Henkels	and McCoy	,	1			Future	e Telecom, Inc.		
	Item & Description	(A) Estimated Yearly Quantities	(B) Unit of Measure	Cost Per Unit (All Labor	(D) Cost Per Jnit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities
K-18	Bore and install 1 - 4" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	2,000	Ft.	4.57	9.91	14.48	28,960.00	2,000	Ft.	3.50	14.00	17.50	35,000.00
K-19	Bore and install 2 - 4" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	9.14	19.81	28.95	28,950.00	1,000	Ft.	7.00	26.00	33.00	33,000.00
K-20	Bore and install 1 - 6" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	8.92	12.38	21.30	21,300.00	1,000	Ft.	8.00	20.00	28.00	28,000.00
K-21	Trench and install 1 - 1.25" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	0.76	4.02	4.78	4,780.00	1,000	Ft.	0.60	10.50	11.10	11,100.00
K-22	Trench and install 1 - 1.25" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	2,000	Ft.	0.76	3.72	4.48	8,960.00	2,000	Ft.	0.60	9.00	9.60	19,200.00
K-23	Trench and install 2 - 1.25" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	1.54	4.33	5.87	5,870.00	1,000	Ft.	1.20	11.00	12.20	12,200.00
K-24	Trench and install 1 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	0.97	4.02	4.99	4,990.00	1,000	Ft.	0.70	10.50	11.20	11,200.00
K-25	Trench and install 1 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	5,000	Ft.	0.97	3.72	4.69	23,450.00	5,000	Ft.	0.70	9.00	9.70	48,500.00
K-26	Trench and install 2 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	1.93	4.33	6.26	6,260.00	1,000	Ft.	1.40	11.00	12.40	12,400.00
K-27	Trench and install 2 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	3,000	Ft.	1.93	4.02	5.95	17,850.00	3,000	Ft.	1.40	9.00	10.40	31,200.00
K-28	Trench and install 3 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	2.90	4.64	7.54	7,540.00	1,000	Ft.	2.10	11.50	13.60	13,600.00
K-29	Trench and install 3 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	2,000	Ft.	2.90	4.64	7.54	15,080.00	2,000	Ft.	2.10	9.50	11.60	23,200.00
K-30	Trench and install 4 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	3.86	5.26	9.12	9,120.00	1,000	Ft.	2.80	12.00	14.80	14,800.00
K-31	Trench and install 4 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)	2,000	Ft.	3.86	4.95	8.81	17,620.00	2,000	Ft.	2.80	11.00	13.80	27,600.00
K-32	Trench and install 1 - 2" HDPE SDR 11 Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	1.36	4.02	5.38	5,380.00	1,000	Ft.	1.00	10.50	11.50	11,500.00
K-33	Trench and install 2 - 2" HDPE SDR 11 Duct 1' to 1,000' price per foot (labor and materials)	3,000	Ft.	2.72	4.52	7.24	21,720.00	3,000	Ft.	2.00	11.00	13.00	39,000.00
K-34	Trench and install 3 - 2" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	4.09	5.02	9.11	9,110.00	1,000	Ft.	3.00	12.00	15.00	15,000.00
K-35	Trench and install 4 - 2" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	5.45	5.51	10.96	10,960.00	1,000	Ft.	4.00	13.00	17.00	17,000.00
K-36	Trench and install 1 - 4" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	4.57	4.95	9.52	9,520.00	1,000	Ft.	3.50	12.00	15.50	15,500.00
K-37	Trench and install 2 - 4" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	9.14	7.43	16.57	16,570.00	1,000	Ft.	7.00	14.00	21.00	21,000.00
K-38	Trench and install 3 - 4" HDPE SDR 11 Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	13.70	9.91	23.61	23,610.00	1,000	Ft.	10.50	18.00	28.50	28,500.00
K-39	Trench and install 4 - 4" HDPE SDR 11 Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	18.28	12.38	30.66	30,660.00	1,000	Ft.	14.00	20.00	34.00	34,000.00
K-40	Trench and install 1 - 6" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	8.92	7.43	16.35	16,350.00	1,000	Ft.	8.00	15.00	23.00	23,000.00
K-41	Trench and install 1 - 2" PVC Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	1.10	4.02	5.12	5,120.00	1,000	Ft.	0.85	11.00	11.85	11,850.00
K-42	Trench and install 2 - 2" PVC Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	2.21	4.52	6.73	6,730.00	1,000	Ft.	1.70	11.50	13.20	13,200.00
K-43	Trench and install 3 - 2" PVC Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	3.30	5.02	8.32		1,000	Ft.	2.55	12.00		14,550.00
K-4	Trench and install 4 - 2" PV C Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	4.41	4.95	9.36	9,360.00	1,000	Ft.	3.40	13.00	16.40	16,400.00
K-45	Trench and install 1 - 4" PVC Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	3.09	4.95	8.04		1,000	Ft.	2.50	11.50		14,000.00
K-46	Trench and install 2 - 4" PVC Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	6.17	7.43	13.60	13,600.00	1,000	Ft.	5.00	12.50	17.50	17,500.00
K-47	Trench and install 3 - 4" PVC Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	9.25	9.91	19.16	19,160.00	1,000	Ft.	7.50	17.00	24.50	24,500.00
K-48	Trench and install 4 - 4" PV C Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	12.33	12.38	24.71	24,710.00	1,000	Ft.	10.00	18.00		28.000.00

Company Name				H and M H	enkels and McCo	,	1			Future	e Telecom, Inc.		
	Item & Description	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities
K-49	Trench and install 1 - 6" PVC Duct 1' to 1,000' price per foot (labor and materials)	1,000	Ft.	6.07	7.43	13.50	13,500.00	1,000	Ft.	6.00	13.00	19.00	19,000.00
K-50	2" Bore Without Duct Cost - 2"	5,000	Ft.	0.00	7.43	7.43		5,000	Ft.		10.00	10.00	50,000.00
K-51	4" Bore Without Duct Cost - 4"	5,000	Ft.	0.00	9.91	9.91		5,000	Ft.		14.00	14.00	70,000.00
K-52	6" Bore without Duct Cost - 6"	5,000	Ft.	0.00	12.38	12.38	61,900.00	5,000	Ft.		18.00	18.00	90,000.00
K-53	Rock Adder for boring per foot	5,000	Ft.	0.00	7.43	7.43	37,150.00	5,000	Ft.		10.00	10.00	50,000.00
K-54	Depth Adder boring per foot deeper than 20 feet	5,000	Ft.	0.00	24.00	24.00	120,000.00	5,000	Ft.		20.00	20.00	100,000.00
K-55	Rock Adder for trenching per foot	1,000	Ft.	0.00	3.72	3.72	3,720.00	1,000	Ft.		5.00	5.00	5,000.00
K-56	3" Orange Warning Tape w/ "Garland ISD Fiber Optic Cable Call 1-800- DigTess" to be installed during trenching operations min. 1' above cable facilities (labor and Material)	20,000	Ft.	0.06	0.00	0.06	1,200.00	20,000	Ft.	0.05	0.10	0.15	3,000.00
K-57	Excavate Splice Pit 1' to 4' Deep	20	Ea.	0.00	247.68	247.68	4,953.60	20	Ea.		750.00	750.00	15,000.00
K-58	Excavate Splice Pit 4' to 8' Deep	20	Ea.	0.00	464.40	464.40		20	Ea.		1,550.00	1,550.00	31,000.00
K-59	Excavate Splice Pit 8' to 12' Deep	5	Ea.	0.00	835.92	835.92		5	Ea.		2,950.00	2,950.00	14,750.00
K-60	Cable pulling in duct cost per foot	5,000	Ft.	0.06	0.60	0.66		5,000	Ft.		1.00		5,000.00
K-61	Pull cable out of existing duct cost per foot	5,000	Ft.	0.00	0.60	0.60	3,000.00	5,000	Ft.		1.00	1.00	5,000.00
K-62	Concrete Demolition - removal & restoration per cubic yard	100	per cubic yard	123.84	594.43	718.27	71,827.00	100	per cubic yard	175.00	145.00	320.00	32,000.00
K-63	Asphalt/Pavement removal & restoration per cubic yard	100	per cubic yard	123.84	594.43	718.27	71,827.00	100	per cubic yard	145.00	150.00	295.00	29,500.00
K-64	Removal of hand hole	10	Ea.	0.00	320.00	320.00	3,200.00	10	Ea.		350.00	350.00	3,500.00
K-65	Removal of hand hole & backfill	10	Cubic yards	0.00	500.00	500.00	5,000.00	10	Cubic yards	50.00	450.00	500.00	5,000.00
						Totals Section K	1,308,245.20					Totals Section K	1,720,950.00
Section L	CAT 5E Data Cables Installed, Terminated, Labeled and Tested Per Campus (Systimax Products Only) (refer to section NN pg 61)												
L-1	Between 1 and 3 (250' Average) per cable (Labor and Materials)	100	Ea.	97.74	154.80	252.54	25,254.00	100	Ea.			0.00	0.00
L-2	Non-Standard Drop - Between 1 and 3 (225' Average) per cable	100	Ea.	121.41	154.80	276.21	27,621.00	100	Ea.			0.00	0.00
L-3	Between 4 and 9 (250' Average) per cable (Labor and Materials)	100	Ea.	97.74	154.80	252.54	25,254.00	100	Ea.			0.00	0.00
L-4	Non-Standard Drop - Between 4 and 9 (225' Average) per cable	100	Ea.	121.41	154.80	276.21	27,621.00	100	Ea.			0.00	0.00
		4	_										
L-5	Between 10 and 25 (250' Average) per cable (Labor and Materials)	100	Ea.	97.74	129.00	226.74	22,674.00	100	Ea.			0.00	0.00
L-6	Non-Standard Drop - Between 10 and 25 (225' Average) per cable	100	Ea.	121.41	129.00	250.41	25,041.00	100	Ea.			0.00	0.00
L-7	Between 26 and 99 (250' Average) per cable (Labor and Materials)	100	Ea.	97.74	103.20	200.94	20,094.00	100	Ea.			0.00	0.00
L-8	Non-Standard Drop - Between 26 and 99 (225' Average) per cable	100	Ea.	121.41	103.20	224.61	22,461.00	100	Ea.			0.00	0.00
L-9	One hundred or more (250' Average) per cable (Labor and Materials)	100	Ea.	97.74	103.20	200.94	20,094.00	100	Ea.			0.00	0.00
L-10	Ten or more drops lacated in a room adjacent to an MDF/IDF where the cables average less than 50° per cable (Labor and Materials)	100	Ea.	121.41	77.40	198.81	· · · · · · · · · · · · · · · · · · ·	100	Ea.			0.00	0.00
						Totals Section L	235,995.00					Totals Section L	0.

Company Name				H and M	Henkels and McCo	у				Futur	e Telecom, Inc.		
	Item & Description		(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities	(A) Estimated Yearly Quantities	(B) Unit of Measure	(C) Material Cost Per Unit (All Componets)	(D) Labor Cost Per Unit	(E) Material Cost Per Unit plus Labor cost per unit	(F) Total Material Cost Per Unit plus Labor cost per unit x Estimated Yearly Quantities
	CAT 6 Data Cables Installed, Terminated, Labeled and Tested												
Section M M-1	(Systimax Products Only) (refer to section OO pg 65) Between 1 and 3 (225' Average) per cable	100	Ea.	155.83	154.80	310.63	31,063.00	100	Ea.			0.00	0.00
			Ea.										
M-2 M-3	Non-Standard Drop - Between 1 and 3 (225' Average) per cable Between 4 and 9 (225' Average) per cable	100 100	Ea. Ea.	215.69 155.83		370.49 310.63		100	Ea. Ea.			0.00	
							·						
M-4 M-5	Non-Standard Drop - Between 4 and 9 (225' Average) per cable Between 10 and 25 (225' Average) per cable	100 100	Ea. Ea.	215.69 155.83		370.49 284.83		100	Ea.			0.00	
M-6	Non-Standard Drop - Between 10 and 25 (225' Average) per cable	100	Ea.	215.69	129.00	344.69	34,469.00	100	Ea.			0.00	0.00
M-7	Between 26 and 99 (225' Average) per cable	100	Ea.	155.83				100	Ea.			0.00	
M-8	Non-Standard Drop - Between 26 and 99 (225' Average) per cable	100	Ea.	215.69	103.20	318.89	31,889.00	100	Ea.			0.00	0.00
M-9	One hundred or more (225' Average) per cable	100	Ea.	155.83				100	Ea.			0.00	
M-10	Ten or more drops located in a room adjacent to an MDF/IDF where the cables average less than 50' per cable	100	Ea.	56.76	82.56	139.32	13,932.00	100	Ea.			0.00	0.00
						Totals Section M	296,803.00					Totals Section M	0.00
Section N	Accessories for Structured Cabling												
N-1	Caddy J-Hooks	100	Ea.	5.16	1.55	6.71	671.00	100	Ea.			0.00	0.00
N-2	SC 50 micron Systimax Connectors (Field Installable) Include consumables	100	Ea.	8.46	19.61	28.07	2,807.00	100	Ea.	6.50	50.00	56.50	5,650.00
N-3	LC 50 micron Systimax Connectors (Field Installable) Include consumables	100	Ea.	6.91	19.61	26.52	2,652.00	100	Ea.	6.00	50.00	56.00	5,600.00
N-4	SC 62.5 micron Systimax Fiber Connectors (Field Installable) Include consumables	100	Ea.	8.46	19.61	28.07	2,807.00	100	Ea.	6.00	50.00	56.00	5,600.00
N-5	LC 62.5 micron Systimax Fiber Connectors (Field Installable) Include consumables	100	Ea.	6.91	19.61	26.52	2,652.00	100	Ea.	7.50	50.00	57.50	5,750.00
N-6	SC Singlemode Systimax Fiber Connector (Field Installable) Include consumables	100	Ea.	8.70	19.61	28.31	2,831.00	100	Ea.	6.50	50.00	56.50	5,650.00
N-7	LC Singlemode Systimax Fiber Connector (Field Installable) Include consumables	100	Ea.	7.29	19.61	26.90	2,690.00	100	Ea.	7.50	50.00	57.50	5,750.00
N-8	Grounding NEC approved bus bar (12" w/various lug configurations) and 200' of #6AWG Green Insulated solid copper wire to be run to building MGN. GISD Electrician to terminate at MGN end.	100	Ea.	307.17				100	Ea.	295.00			
N-9	#6 AWG Green Insulated solid copper wire to be run to building MGN, increments of 50' over the initial 200'	100	Ea.	36.42	43.34	79.76	7,976.00	100	Ea.	37.50	50.00	87.50	8,750.00
	The second of th			30.42	10.04	Totals Section N				37.30		Totals Section N	
Section O	Portable Classrooms												
O-1	Single classroom portable w/25 pair connectivity up to 100' in length and (3) CAT 5E drops	50	Ea.	978.34	464.40	1,442.74	72,137.00	50	Ea.			0.00	0.00
0-2	25-pair connectivity add per 25-foot increments over 100'	50	Ea.	43.14	30.96	74.10	3,705.00	50	Ea.			0.00	0.00
	Double classroom portable w/25 pair connectivity up to 100' in length and (6) CAT 5E drops	50		1,228.10				50	Ea.			0.00	
O-3 O-4	(6) CAT 5E drops Add per drop over the standard (3 or 6) drops per classroom	50	Ea.	1,228.10		1,950.50		50	Ea.			0.00	
O-5	Six strand indoor/outdoor milti-mode fiber installed in 1" plenum innerduct from the portable IDF to the main building MDF; terminated, labeled, and tested (up to 300')	50	Ea.	859.66		1,849.35		50	Ea.	750.00	650.00		
O-6	Six-strand fiber MM installed in 1" plenum rated innerduct Systimax add per 50' increments over 300'	50	Ea.	224.61	120.74	-			Ea.	125.00	100.00		11,250.00

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						Totals Section O	297,137.00					Totals Section O	81,250.0
Section P	Labor Requirements												
P-1	Fiber cable splicer - Hourly labor rate(Including all required equipment such as OTDR, Power Meter, Fusion Splicer, and consumables)	1	Hr.	0.00	99.07	99.07	99.07	1	Hr.		125.00	125.00	125.0
P-2	Fiber cable splicer - Hourly labor rate Overtime (Including all required equipment such as OTDR, Power Meter, Fusion Splicer, and consumables)	1	Hr.	0.00	118.89	118.89	118.89	1	Hr.		165.00	165.00	165.0
P-3	OSP Supervisor - Hourly labor rate Including Vehicle (must be OSP Systimax Certified)	1	Hr.	0.00	50.77	50.77	50.77	1	Hr.		75.00	75.00	75.0
P-4	OSP Supervisor - Hourly labor rate Overtime Including Vehicle (must be OSP Systimax Certified)	1	Hr.	0.00	74.30	74.30	74.30	1	Hr.		102.50	102.50	102.5
P-5	OSP Foreman - Hourly labor rate Including Vehicle (must be OSP Systimax Certified)	1	Hr.	0.00	43.34	43.34	43.34	1	Hr.		48.00	48.00	48.0
P-6	OSP Foreman - Hourly labor rate Overtime Including Vehicle (must be OSP Systimax Certified)	1	Hr.	0.00	61.92	61.92	61.92	1	Hr.		72.00	72.00	72.0
P-7	Skilled Labor - Hourly labor rate	1	Hr.	0.00	28.48	28.48	28.48	1	Hr.		30.00	30.00	30.0
P-8	Skilled Labor - Hourly labor rate Overtime	1	Hr.	0.00	40.87	40.87	40.87	1	Hr.		45.00	45.00	45.0
P-9	Laborer - Hourly labor rate	1	Hr.	0.00	27.24	27.24	27.24	1	Hr.		26.00	26.00	26.0
P-10	Laborer - Hourly labor rate Overtime	1	Hr.	0.00	39.63	39.63	39.63	1	Hr.		39.00	39.00	39.0
P-11	OSP Design Engineer - Hourly labor rate - Must be a BICSI Registered Communication Distribution Designer (RCDD), BICSI OSP Specialist, and Systimax OSP Certified.	1	Hr.	0.00	82.56	82.56	82.56	1	Hr.		65.00	65.00	65.0
P-12	OSP Cable Locator - Hourly labor rate - includes vehicle, locating equipment, and electronic communication equipment such as laptop and cellular phone.	1	Hr.	0.00	74.30	74.30	74.30	1	Hr.		68.00	68.00	68.0
P-13	Technician Inside Plant Systimax BICSI Certified - Hourly labor rate	1	Hr.	0.00	52.63	52.63	52.63	1	Hr.			0.00	0.0
P-14	Technician Inside Plant Systimax BICSI Certified - Hourly labor rate overtime	1	Hr.	0.00					Hr.			0.00	
P-15	Survey costs - Hourly labor rate	1	Hr.	0.00	214.29	214.29	214.29	1	Hr.		85.00	85.00	85.0
						Totals Section P	1,079.50					Totals Section P	
			1			Total All Sections	3,956,409.78	1				Total All Sections	3,474,249.5