

17.0 Appendix E – Detailed Electrical Initial Costs

| VAV Wire Costs | | | | |
|----------------|---------|-----------------------|-------------------------|-----------------|
| Wire Size | # Wires | Estimated Length (ft) | Unit Wire Cost \$/100ft | Wire Cost |
| 14 | 1 | 6877 | \$41.50 | \$2,854 |
| 12 | 4 | 4916 | \$50.00 | \$2,458 |
| 10 | 3 | 538 | \$250.00 | \$1,345 |
| 8 | 3 | 2420 | \$78.00 | \$1,888 |
| 3 | 1 | 1261 | \$152.00 | \$1,917 |
| 1 | 1 | 302 | \$209.00 | \$631 |
| 1 | 3 | 2383 | \$209.00 | \$4,980 |
| 1/0 | 1 | 50 | \$250.00 | \$125 |
| 1/0 | 3 | 4332 | \$250.00 | \$10,830 |
| 4/0 | 4 | 302 | \$420.00 | \$1,268 |
| 500 | 4 | 685 | \$765.00 | \$5,240 |
| Total | | | | \$33,537 |

Table E-1: VAV Wire Costs

| VAV Conduit Costs | | | |
|-------------------|-----------------------|-------------------------|------------------|
| Conduit Size | Estimated Length (ft) | Unit Conduit Cost \$/ft | Conduit Cost |
| 1/2" | 6877 | \$6.85 | \$47,107 |
| 3/4" | 5454 | \$8.10 | \$44,177 |
| 1 1/4" | 2072 | \$11.75 | \$24,346 |
| 1 1/2" | 1122 | \$13.20 | \$14,810 |
| 2" | 3256 | \$15.90 | \$51,770 |
| 2 1/2" | 578 | \$22.00 | \$12,716 |
| 3 1/2" | 122 | \$33.50 | \$4,087 |
| 4" | 1261 | \$40.00 | \$50,440 |
| Total | | | \$249,455 |

Table E-2: VAV Conduit Costs

| VAV Breaker Costs | | | | |
|-------------------|------------------|--------|-----------|-----------------|
| Breaker Size | Number of Phases | Number | Unit Cost | Breaker Costs |
| 15 A | 1 | 23 | \$92.50 | \$2,128 |
| 20 A | 3 | 1 | \$615.00 | \$615 |
| 30 A | 3 | 7 | \$615.00 | \$4,305 |
| 40 A | 3 | 1 | \$615.00 | \$615 |
| 90 A | 3 | 2 | \$850.00 | \$1,700 |
| 150 A | 3 | 7 | \$850.00 | \$5,950 |
| Total | | | | \$15,313 |

Table E-3: VAV Breaker Costs

| VAV Electric Panel Costs | | | |
|--------------------------|--------|-----------------|-----------------|
| Ampacity Rating | Number | Panel Unit Cost | Panel cost |
| 225 A | 1 | \$5,225 | \$5,225 |
| 400 A | 2 | \$6,325 | \$12,650 |
| 800A | 1 | \$11,135 | \$11,135 |
| Total | | | \$29,010 |

Table E-4: VAV Electric Panel Costs

| DOAS Wire Costs | | | | |
|-----------------|---------|-----------------------|-------------------------|-----------------|
| Wire Size | # Wires | Estimated Length (ft) | Unit Wire Cost \$/100ft | Wire Cost |
| 12 | 4 | 4152 | \$50.00 | \$2,076 |
| 10 | 1 | 302 | \$60.00 | \$181 |
| 8 | 1 | 585 | \$78.00 | \$456 |
| 4 | 1 | 676 | \$136.00 | \$919 |
| 3 | 4 | 302 | \$152.00 | \$459 |
| 1/0 | 3 | 1994 | \$250.00 | \$4,985 |
| 3/0 | 4 | 585 | \$355.00 | \$2,077 |
| 300 | 4 | 676 | \$535.00 | \$3,617 |
| Total | | | | \$14,770 |

Table E-5: DOAS Wire Costs

| DOAS Conduit Costs | | | |
|--------------------|-----------------------|-------------------------|------------------|
| Conduit Size | Estimated Length (ft) | Unit Conduit Cost \$/ft | Conduit Cost |
| 3/4" | 4152 | \$8.10 | \$33,631 |
| 1 1/2" | 302 | \$13.20 | \$3,986 |
| 2" | 1994 | \$15.90 | \$31,705 |
| 3" | 585 | \$27.50 | \$16,088 |
| 3 1/2" | 676 | \$33.50 | \$22,646 |
| Total | | | \$108,056 |

Table E-6: DOAS Conduit Costs

| DOAS Breaker Costs | | | | |
|--------------------|------------------|--------|-----------|----------------|
| Breaker Size | Number of Phases | Number | Unit Cost | Breaker Costs |
| 20 A | 3 | 4 | \$615.00 | \$2,460 |
| 150 A | 3 | 4 | \$850.00 | \$3,400 |
| Total | | | | \$5,860 |

Table E-7: DOAS Breaker Costs

| DOAS Electric Panel Costs | | | |
|---------------------------|--------|-----------------|-----------------|
| Ampacity Rating | Number | Panel Unit Cost | Panel cost |
| 100 A | 1 | \$3,525 | \$3,525 |
| 200 A | 1 | \$5,225 | \$5,225 |
| 300 A | 1 | \$5,775 | \$5,775 |
| Total | | | \$14,525 |

Table E-8: DOAS Electric Panel Costs