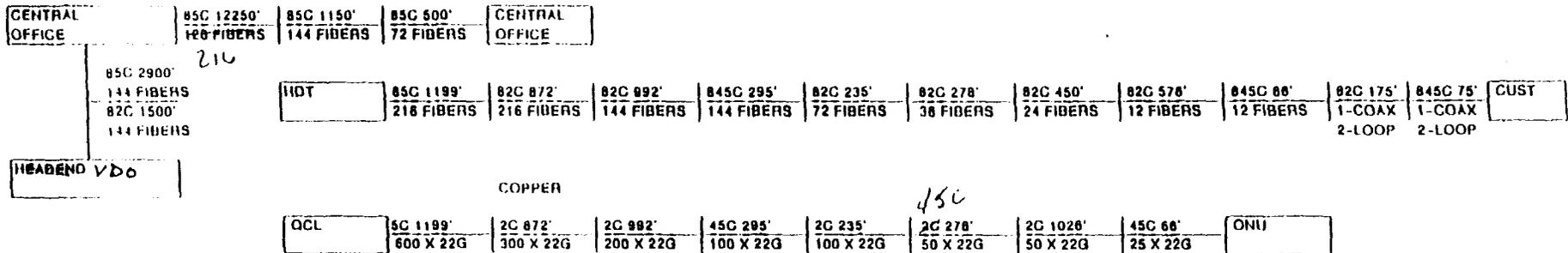


PROJECT AVIS
BROAD BAND SERVICE
SAMPLE AREA 'B'

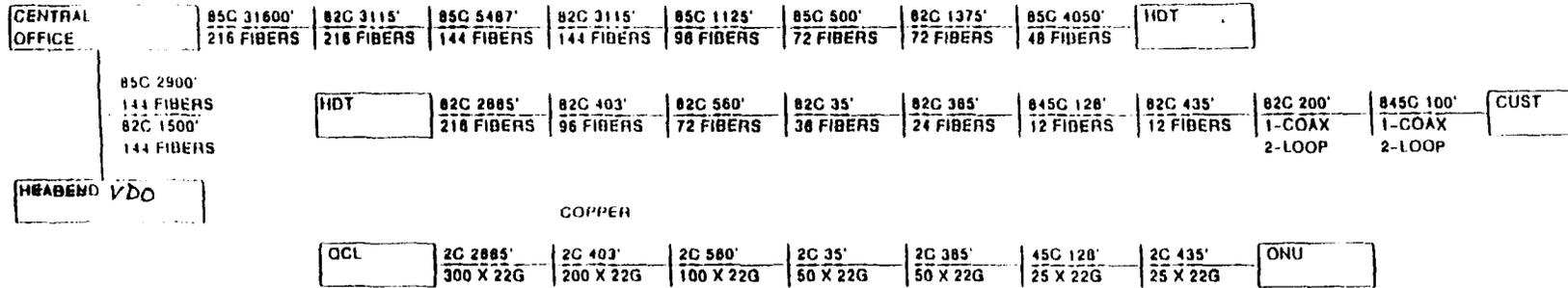


EAST DOVER TOMS RIVER
C.O. C.O. AVERAGE

AVERAGE OF 2 AREAS

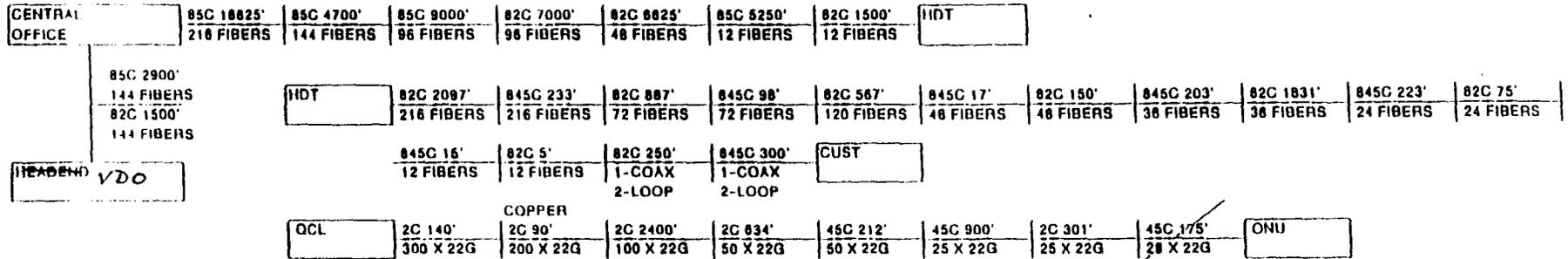
| | | | |
|--------------------|------|------|------|
| LIVING UNITS- | 2027 | 1162 | 1594 |
| WORKING CKTS- | 2635 | 1359 | 1997 |
| 257C HDT'S- | 9 | 5 | 7 |
| 257C ONU'S- | 337 | 194 | 266 |
| 257C OCL'S- | 6 | 4 | 5 |
| 4C 1-24' CEV | 0 | 0 | 0 |
| 557C 1-DDM2000 MUX | 0 | 0 | 0 |
| 257C FTE | 12 | 7 | 10 |
| TOTAL FIBERS OUT- | 808 | 468 | 638 |

PROJECT AVIS
 BROAD BAND SERVICE
 SAMPLE AREA 'C'



- AVERAGE OF 8 AREAS
- LIVING UNITS-2078
 - WORKING CKTS-2425
 - 257C HDT'S-84
 - 257C OCL'S-5.9
 - 4C 1-30' CEV
 - 557C 2-DDM2000 MUX
 - 257C NORTHERN TELCOM -FTE
 - HIGH DENSITY - 1440 PORTS
 - AVG PORT USAGE-872
 - 257C 5-200 AMP RECTIFIERS
 - 257C 20-BATTERY STRINGS

PROJECT AVIS
 BROAD BAND SERVICE
 SAMPLE AREA 'D'



- AVERAGE OF 4 AREAS
- LIVING UNITS-888
 - WORKING CKTS-992
 - 257C HDT'S-3.75
 - 257C ONU'S-143
 - 257C QCL'S-3
 - 557C 1-DDM2000 MUX
 - 257C NORTHERN TELCOM -FTE
 - HIGH DENSITY - 1440 PORTS
 - AVG PORT USAGE-365
 - 257C REMOTE POWER UNITS-1
 - 257C 8-50 AMP RECTIFIERS
 - 257C 9-BATTERY STRINGS

VIDEO SERVING OFFICE EQUIPMENT

t)

Broadcast Video Path: Telephone Company Central Office with Protection Switching

| Product Description | Units Needed | Unit Price | Total Material Price | Maximum Service Capacity | Utilization |
|--|--------------|------------|----------------------|--------------------------|-------------|
| Lightguide Terminating Equipment: Equipment Side AT&T LGX | 1 | ██████████ | ██████████ | 1609398 | 85% |
| Lightguide Terminating Equipment: Facility Side AT&T LGX | 1 | ██████████ | ██████████ | 2069226 | 85% |
| Protection Select Switch FIBERCELL | 1 | ██████████ | ██████████ | 38319 | 85% |
| Fiber Optic Signal Splitter 1:8 Splitter | 3 | ██████████ | ██████████ | 148874 | 21% |

| Product Description | Labor Hours | Job Function Code | Labor Rate | Labor Inv. | Material Plus Labor Inv. | Investment per Unit of Service | Utilized Investment per Service |
|--|-------------|-------------------|------------|------------|--------------------------|--------------------------------|---------------------------------|
| Lightguide Term. Eq.: Equipment Side AT&T LGX | 10 | 3170 | \$68.16 | \$681.60 | ██████████ | ██████████ | ██████████ |
| Lightguide Term. Eq.: Facility Side AT&T LGX | 10 | 3170 | \$68.16 | \$681.60 | ██████████ | ██████████ | ██████████ |
| Protection Select Switch FIBERCELL | 2 | 3170 | \$68.16 | \$136.32 | ██████████ | ██████████ | ██████████ |
| Fiber Optic Signal Splitter 1:8 Splitter | 2 | 3170 | \$68.16 | \$136.32 | ██████████ | ██████████ | ██████████ |

Total Investment per BBT Video Service Unit: \$0.85

A:\DOVER.WK4

Broadcast Video Path Assumptions:

Telephone Company Central Office with Protection Switching

| Product Description | Units Needed | Labor Hours | Job Description |
|--|--------------|-------------|-----------------|
| Lightguide Terminating Equipment: Equipment Side AT&T LGX | 1 | 10 | Engineer |
| Lightguide Terminating Equipment: Facility Side AT&T LGX | 1 | 10 | Engineer |
| Protection Select Switch FIBERCELL | 1 | 2 | Engineer |
| Fiber Optic Signal Splitter 1:8 Splitter | 3 | 2 | Engineer |

Material Price List:

Unit Price *

Lightguide Terminating Equipment: Equipment Side

██████████

Lightguide Terminating Equipment: Facility Side

██████████

Protection Select Switch

██████████

Fiber Optic Signal Splitter

██████████

Notes:

One AT&T LGX equipment side terminates 504 fibers and one AT&T LGX facility side terminates 648 fibers. Through splitting, twelve fibers from the BroadBand Technologies headend can supply 38,319 subscribers in an area with broadcast video service. Therefore, 504 fibers can theoretically supply 1,609,398 subscribers and 648 fibers can theoretically supply 2,069,226 subscribers

Only one protection select switch is required for all the fibers from the headend that terminate in the central office. One fiber can provide 290 video circuits through a Host Distribution Terminal (HDT). Three cascaded fiber optic splitters can therefore theoretically provide $(8 \times 8 \times 8) \times 290 = 148,874$ video circuits.

* VENDOR QUOTE

VIDEO ADMINISTRATION MODULE

| Circuit Investment | A Material | B Cap. | C Unit Inv. | D P+CE | E Quant. | F Tot. Inv |
|---|---------------|-----------|----------------|-----------|-------------|---------------|
| Source: | Note (1) | | A/B | Note (2) | Note (3) | (C+D)*E |
| (1) Memotech | \$205,000.00 | 256 | \$800.78 | \$48.29 | 162 | \$137,549.07 |
| (2) DXI Card | \$1,452.79 | 1 | \$1,452.79 | \$8.76 | 150 | \$219,232.55 |
| (3) VAM | \$61,797.00 | 300 | \$205.99 | \$12.42 | 160 | \$34,945.79 |
| (4) 9.6 Kb Modem | \$1,430.00 | 1 | \$1,430.00 | \$75.88 | 24 | \$36,141.16 |
| (5) DSU | \$770.00 | 1 | \$770.00 | \$26.93 | 320 | \$255,017.59 |
| (6) Total | | | | | | \$682,886.16 |
| (7) Potential Subscribers | | | | | | 38319 |
| (8) Investment per Potential Subscriber Ln (6)/Ln (7) | | | | | | \$17.82 |

NOTES

- (1) Vendor Pricing
- (2) Unit Investment (Column C) * Power and Common Equipment Factor*% of equipment located in CO
10% of DXI cards, 88% of 9.6 Modems, and 58% of DSUs are located in COs-from Engineering estimates.
- (3) Engineering design

| Transport Investment (Fixed) | A Mo. Cost | B Quant. | C Ann. Cost |
|---|---------------|-------------|----------------|
| Source: | Note (1) | Note (2) | A*B*12 |
| (1) Fixed Component (257C) | \$10.88 | 170 | \$22,195.20 |
| (2) Potential Subscribers | | | 38319 |
| (3) Cost per Potential Subscriber Ln (1)/Ln (2) | | | 0.5792 |
| (4) Annual Cost Factor (257C) | | | 0.2954 |
| (5) Investment per Potential Subscriber Ln (3)/Ln (4) | | | \$1.96 |

| Transport Investment (Mileage) | A Mo. Cost | B Quant. | C Ann. Cost |
|---|---------------|-------------|----------------|
| Source: | Note (1) | Note (2) | A*B*12 |
| (1) Per Mile Component | \$0.11 | 2719.76 | \$3,590.08 |
| (2) Potential Subscribers | | | 38319 |
| (3) Cost per Potential Subscriber Ln (1)/Ln (2) | | | 0.0937 |

Cost Distributed based on VDO to VSO OSP Distribution:

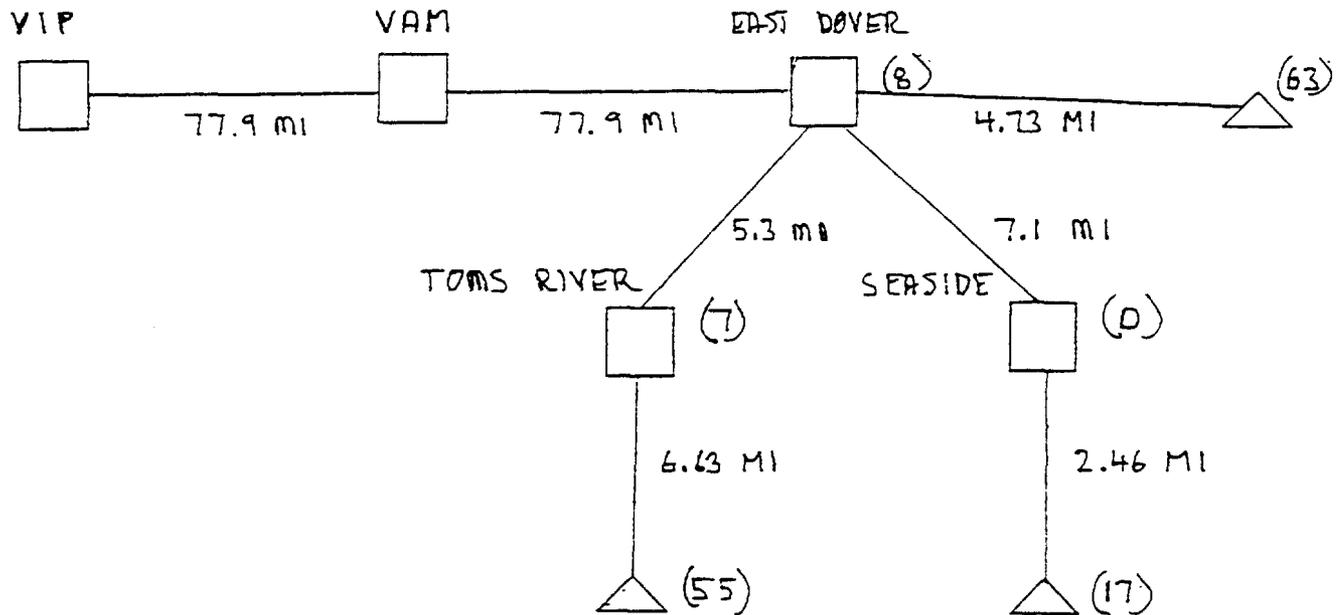
| ACCT. | A % of Total | B Wgt'd Cost | C Cost Factor | D Investment |
|-------|-----------------|-----------------|------------------|-----------------|
| | | A*.0937 | | B/C |
| 1C | 0.025 | \$0.0023 | 0.2969 | \$0.01 |
| 82C | 0.175 | \$0.0164 | 0.2311 | \$0.07 |
| 85C | 0.475 | \$0.0445 | 0.2429 | \$0.18 |
| 4C | 0.325 | \$0.0305 | 0.2152 | \$0.14 |
| TOTAL | 1.00 | \$0.0937 | | \$0.40 |

NOTES

- (1) Access Service Cost Study Results - NJ
- (2) VAM Configuration and Engineering Data (attached)

VIDEO ADMINISTRATION MODULE

CONFIGURATION AND DATA



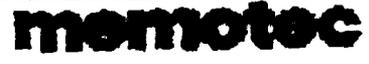
| <u>DESCRIPTION</u> | <u>CKT TYPE</u> | <u>TRUNKS</u> | <u>MILES</u> | <u>TOTAL MILES</u> |
|-----------------------------|-----------------|---------------|--------------|--------------------|
| VIP - VAM | 9.6 KB | 10 | 77.90 | 779.00 |
| VAM - EAST DOVER (MEMOTECH) | 56 KB | 10 | 77.90 | 779.00 |
| MEMOTECH - EAST DOVER HDT | 56 KB | 8 | 1.00 | 8.00 |
| EAST DOVER (MEMOTECH) - HDT | 56 KB | 63 | 4.73 | 297.99 |
| MEMOTECH - TOMS RIVER | 56 KB | 7 | 5.30 | 37.10 |
| TOMS RIVER (MEMOTECH) - HDT | 56 KB | 55 | 11.93 | 656.15 |
| MEMOTECH - SEASIDE | 56 KB | 0 | 7.10 | 0.00 |
| SEASIDE (MEMOTECH) - HDT | 56 KB | 17 | 9.56 | 162.52 |
| TOTAL | | 170 | | 2719.76 |

SOURCE: DOVER ENGINEERING ORGANIZATION

VIDEO-ON-DEMAND QUOTATION

| LOCATION | DATE | REVISION | |
|---|--------------|--|---------------------|
| EAST DOVER (OSS) | Aug 17, 1994 | | |
| PART NUMBER | QTY | DESCRIPTION | AMOUNT |
| EQ-BA-1A | TBD | 78-inch Cabinet, w/ Fuse Panel | |
| ACP-24CX1 | TBD | Alarm Concentrator Panel | |
| NA16FAN48 | (see SPARES) | NA16 Fan Assembly | |
| TV800-00005 | ONMTB005MA | CX1000/16, w/ redundant 48VDC Power Supply | |
| CX850-04004 | (see SPARES) | PX850 Switch Card Set | |
| O1000414 | (see SPARES) | V.35 Line Interface Drivers | |
| O1000339 | (see SPARES) | RS232 Line Interface Drivers | |
| SYSTEM TOTAL | | | \$182,104.00 |
| RECOMMENDED SPARES: | | | |
| P-24CX1 | TBD | Alarm Concentrator Panel | |
| NA16FAN48 | T1MYANM4AA | NA16 Fan Assembly | |
| O1000884 | CNPQAKVNAA | CX1000 48VDC Power Supply | |
| O1000885 | CNPQAKWNAA | CX1000 Power Distrib'n Card | |
| PX850-CPU | CNPQAKXNAA | PX850 Switch Card (front) | |
| PX850-I/O | ONILUTJ08AA | PX850 Switch Card (rear) | |
| O1000414 | CNPQALDNAA | V.35 Line Interface Drivers | |
| O1000339 | CNPQALONAA | RS232 Line Interface Drivers | |
| SPARES TOTAL | | | \$13,418.00 |
| FOR YOUR INFORMATION | 1 | INSTALLATION SERVICES (8am-8pm, Mon-Fri) | \$4,800.00 |
| ORDER TOTAL | | | \$210,023.00 |
| <p>NOTE: The above quotation does not include any of the cables!</p> <p style="text-align: center;"><i>Price for one system we ordered two (2)</i></p> | | | |

Approx. \$ 410 000



Terminal: Bay Equipment

| Product Description | Units Needed | Unit Price | Total Material Price * | Maximum Service Capacity | Utilization |
|-------------------------|--------------|------------|------------------------|--------------------------|-------------|
| Fuse Panel | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| FUSE PANEL 1101 | | | | | |
| Fan Assembly | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| HDT FAN 1101 SHELF ASSY | | | | | |

| | Labor Hours | Job Function Code | Labor Rate | Labor Inv. | Material Plus Labor Inv. | Investment per Pot Sub | Utilized Investment per Pot Sub |
|--------------|-------------|-------------------|------------|------------|--------------------------|------------------------|---------------------------------|
| Fuse Panel | 2 | 3250 | \$54.66 | \$109.32 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 4 | 4220 | \$50.91 | \$203.64 | [REDACTED] | [REDACTED] | [REDACTED] |
| Fan Assembly | 2 | 3250 | \$54.66 | \$109.32 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 4 | 4220 | \$50.91 | \$203.64 | [REDACTED] | [REDACTED] | [REDACTED] |
| Total: | | | | | [REDACTED] | [REDACTED] | [REDACTED] |

Note:

Engineering the Host Digital Terminal (HDT) for 290 circuits, each circuit delivering 1.3 dial tone lines, will utilize the HDT to 100% of its 378 dial tone line capacity.

* TAB N

Host Digital Terminal: Broadband Common Shelf

| Product Description | Units Needed | Unit Price | Total Material Price | Maximum Service Capacity | Utilization |
|---|--------------|------------|----------------------|--------------------------|-------------|
| Shelf Assembly CS 1101 SHELF | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Memory and Test Controller (MTC) Card MTC 1101 CARD | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Timeslot Inerchanger/Call Processor (TSI/CP) Card TSI/CP 1101 CARD | 2 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Power Supply (PSU) Card PSU 1101 CARD | 5 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Alarm (ALM) Card ALARM 1101 CARD | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Dual Trunk Interface (DTI) Card DTI 1101 CARD | 8 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Alarm Interface Cabling ALARM INTERFACE CABLE | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Subscriber Shelf Cabling SUBSCRIBER SHELF CABLE KIT | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| DS1 Interface Cabling DS1 INTERFACE CABLE | 2 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| TV Controller (TVC) Card TVC 1101 CARD | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Supertrunk Receiver (STR) Card STR 1101 CARD | 4 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Remote Maintenance Unit Interface Card RMUI 1001 CARD | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |
| Air Cooler FLX 1101 CS AIR FLOW KIT | 1 | [REDACTED] | [REDACTED] | 290.77 | 100% |

| | Labor Hours | Job Function Code | Labor Rate | Labor Inv. | Material Plus Labor Inv. | Investment per Pot Sub | Utilized Investment per Pot Sub |
|-------------------------------------|-------------|-------------------|------------|------------|--------------------------|------------------------|---------------------------------|
| Shelf Assembly | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Mem. and Test Cont. (MTC) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 1 | 4220 | \$50.91 | \$50.91 | [REDACTED] | [REDACTED] | [REDACTED] |
| Tslot Int./Call Proc. (TSI/CP) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Power Supply (PSU) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 1 | 4220 | \$50.91 | \$50.91 | [REDACTED] | [REDACTED] | [REDACTED] |
| Alarm (ALM) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Dual Trunk Interface (DTI) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 1 | 4220 | \$50.91 | \$50.91 | [REDACTED] | [REDACTED] | [REDACTED] |
| Alarm Interface Cabling | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Subscriber Shelf Cabling | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| DS1 Interface Cabling | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| TV Controller (TVC) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 1 | 4220 | \$50.91 | \$50.91 | [REDACTED] | [REDACTED] | [REDACTED] |
| Supertrunk Receiver (STR) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 1 | 4220 | \$50.91 | \$50.91 | [REDACTED] | [REDACTED] | [REDACTED] |
| IU Interface Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Air Cooler | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 1 | 4220 | \$50.91 | \$50.91 | [REDACTED] | [REDACTED] | [REDACTED] |
| Total: | | | | | | \$69.57 | \$69.57 |

*TAB N

Host Digital Terminal: Broadband Subscriber Shelf

| Product Description | Units Needed | Unit Price | Total Material Price * | Maximum Service Capacity | Utilization |
|--|--------------|------------|------------------------|--------------------------|-------------|
| Power Supply (PSU) Card PSU 1101 CARD | 6 | [REDACTED] | [REDACTED] | 96.92 | 100% |
| Shelf Assembly SS 1101 SHELF | 1 | [REDACTED] | [REDACTED] | 96.92 | 100% |
| Narrowband Interface (NBI) Card NBI 1101 CARD | 1 | [REDACTED] | [REDACTED] | 96.92 | 100% |
| Broadband Interface (BBI) Card BBI 1101 CARD | 3 | [REDACTED] | [REDACTED] | 96.92 | 100% |
| Broadband Line (BBL) Card BBL 1101 CARD | 14 | [REDACTED] | [REDACTED] | 96.92 | 100% |
| Air Cooler FLX 1101 SS AIR FLOW KIT | 1 | [REDACTED] | [REDACTED] | 96.92 | 100% |
| Broadband Interface Cable Assembly BBI CABLE ASSY | 4 | [REDACTED] | [REDACTED] | 96.92 | 100% |

| | Labor Hours | Job Function Code | Labor Rate | Labor Inv. | Material Plus Labor Inv. | Investment per Pot Sub | Utilized Investment per Pot Sub |
|---------------------------------|-------------|-------------------|------------|------------|--------------------------|------------------------|---------------------------------|
| Power Supply (PSU) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Shelf Assembly | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Narrowband Interface (NBI) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Broadband Interface (BBI) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Broadband Line (BBL) Card | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Air Cooler | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| Broadband Interface Cable Assy. | 1 | 3250 | \$54.66 | \$54.66 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 2 | 4220 | \$50.91 | \$101.82 | [REDACTED] | [REDACTED] | [REDACTED] |
| | | | | | Total: | \$280.20 | \$280.20 |

Note:

Engineering the Host Digital Terminal (HDT) for 290 circuits, each carrying 1.3 dial tone lines, each subscriber shelf carries 97 circuits, assuming three subscriber shelves per HDT.

* TAB N

BroadBand Technologies Voice Path: HDT not in Telephone Company Central Office

| Product Description | Units Needed | Unit Price * | Total Material Price | Maximum Service Capacity | Utilization |
|--|--------------|--------------|----------------------|--------------------------|-------------|
| Lightguide Terminating Equipment NT FTE | 1 | [REDACTED] | [REDACTED] | 13956.96 | 100% |
| SONET Multiplexer DDM 2000 | 1 | [REDACTED] | [REDACTED] | 516.92 | 85% |
| Digital Signal Crossconnect Bay DSX 56 | 1 | [REDACTED] | [REDACTED] | 1033.85 | 85% |
| Bulk Power Equipment | 1 | [REDACTED] | [REDACTED] | 2326.16 | 85% |

| | Labor Hours | Job Function Code | Labor Rate | Labor Inv. | Material Plus Labor Inv. | Investment per Pot Sub | Utilized Investment per Pot Sub |
|---------------------------------------|-------------|-------------------|------------|------------|--------------------------|------------------------|---------------------------------|
| Lightguide Terminating Equip. | 4 | 3250 | \$54.66 | \$218.64 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 4 | 4220 | \$50.91 | \$203.64 | [REDACTED] | [REDACTED] | [REDACTED] |
| SONET Multiplexer | 2 | 3250 | \$54.66 | \$109.32 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 12 | 4220 | \$50.91 | \$610.92 | [REDACTED] | [REDACTED] | [REDACTED] |
| Digital Signal Crossconnect Bay | 2 | 3250 | \$54.66 | \$109.32 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 4 | 4220 | \$50.91 | \$203.64 | [REDACTED] | [REDACTED] | [REDACTED] |
| Bulk Power Equipment | 2 | 3250 | \$54.66 | \$109.32 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 16 | 4220 | \$50.91 | \$814.56 | [REDACTED] | [REDACTED] | [REDACTED] |
| Total Investment per Unit of Service: | | | | | | | \$94.52 |

BroadBand Technologies Video Path: HDT not in Telephone Company Central Office

| Product Description | Units Needed | Unit Price * | Total Material Price | Maximum Service Capacity | Utilization |
|--|--------------|--------------|----------------------|--------------------------|-------------|
| Lightguide Terminating Equipment NT FTE | 1 | [REDACTED] | [REDACTED] | 101187.96 | 85% |

| | Labor Hours | Job Function Code | Labor Rate | Labor Inv. | Material Plus Labor Inv. | Investment per Pot Sub | Utilized Investment per Pot Sub |
|-------------------------------|-------------|-------------------|------------|------------|--------------------------|------------------------|---------------------------------|
| Lightguide Terminating Equip. | 4 | 3250 | \$54.66 | \$218.64 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 8 | 4220 | \$50.91 | \$407.28 | [REDACTED] | [REDACTED] | [REDACTED] |

BroadBand Technologies HDT to ONU Fiber Path

| Product Description | Units Needed | Unit Price * | Total Material Price | Maximum Service Capacity | Utilization |
|--|--------------|--------------|----------------------|--------------------------|-------------|
| Lightguide Terminating Equipment NT FTE | 1 | [REDACTED] | [REDACTED] | 4176 | 85% |

| | Labor Hours | Job Function Code | Labor Rate | Labor Inv. | Material Plus Labor Inv. | Investment per Pot Sub | Utilized Investment per Pot Sub |
|-------------------------------|-------------|-------------------|------------|------------|--------------------------|------------------------|---------------------------------|
| Lightguide Terminating Equip. | 4 | 3250 | \$54.66 | \$218.64 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 16 | 4220 | \$50.91 | \$814.56 | [REDACTED] | [REDACTED] | [REDACTED] |

*TAB N

BroadBand Technologies Voice Path Assumptions:

HDT not in Telephone Company Central Office

| | Units Needed | Labor Hours | Job Description |
|--|--------------|-------------|---------------------|
| Electronic Digital Signal Crossconnect Bay DACs 4 | 1 | 40 | Engineer |
| SONET Multiplexer DDM 2000 | 1 | 2 12 | Engineer Splicer |
| Lightguide Terminating Equipment: Equipment Side AT&T LGX | 1 | 10 | Engineer |
| Lightguide Terminating Equipment: Facility Side AT&T LGX | 1 | 10 | Engineer |

HDT in Telephone Company Central Office

| | Units Needed | Labor Hours | Job Description |
|--|--------------|-------------|-----------------|
| Electronic Digital Signal Crossconnect Bay DACs 4 | 1 | 40 | Engineer |
| Lightguide Terminating Equipment: Equipment Side AT&T LGX | 1 | 10 | Engineer |
| Lightguide Terminating Equipment: Facility Side AT&T LGX | 1 | 10 | Engineer |

Material Price List:

| | Unit Price * |
|---------------------------------------|--------------|
| Electronic Dig. Sig. Crossconnect Bay | ██████████ |
| SONET Multiplexer | ██████████ |
| Lightguide Term. Eq.: Equipment Side | ██████████ |
| Lightguide Term. Eq.: Facility Side | ██████████ |

Notes:

One Electronic Digital Signal Crossconnect Bay (DACs 4) can terminate up to 244 Digital Signal Level Three (DS3) circuits. Each DS3 can provide twenty-eight DS1 circuits. Each DS1 can provide twenty-four DS0 circuits. Therefore, each DACs 4 bay can terminate up to 163,968 DS0 circuits.

One DDM 2000 multiplexer can terminate 2,016 DS0 circuits.

Every four fibers terminated on an AT&T LGX can provide 2,016 DS0 circuits. Theoretically, the 504 fibers terminated on the equipment side of the AT&T LGX can therefore provide 254,016 DS0 circuits and the 504 fibers on the facility side can provide 326,592 DS0 circuits.

* Vendor Quote

BroadBand Technologies Voice Path: HDT not in Telephone Company Central Office

| Product Description | Units Needed | Unit Price* | Service Capacity |
|--|--------------|-------------|------------------|
| Lightguide Terminating Equipment NT FTE | 1 | [REDACTED] | 13956.96 |
| SONET Multiplexer DDM 2000 | 1 | [REDACTED] | 516.923077 |
| Digital Signal Crossconnect Bay DSX 56 | 1 | [REDACTED] | 1033.84615 |
| Bulk Power Equipment | 1 | [REDACTED] | 2326.16 |

Note:

Four fibers feed a Host Digital Terminal (HDT). Due to the 378 time slot restriction, at 100% utilization, the HDT provides 290 circuits based on 1.3 dial tone lines per circuit. Forty-eight fibers can therefore provide 290 circuits to 12 HDTs. Though splitting, four fibers can feed four HDTs. Therefore, forty-eight fibers can theoretically provide 13,957 circuits of 1.3 dial tone lines each.

Loop electronics are engineered with at least an 85% objective fill.

A DDM 2000 multiplexer can deliver twenty-eight Digital Signal Level One (DS1) signals. Each DS1 signal can carry up to twenty-four dial tone circuits. Therefore, a DDM 2000 multiplexer can provide 517 circuits of 1.3 dial tone lines each.

A digital signal crossconnect (DSX-56) can terminate fifty-six DS1 signals, each with a maximum of twenty-four dial tone lines. Therefore, a DSX-56 can provide 1,034 circuits of 1.3 dial tone lines each.

Bulk power equipment supplying eight HDTs provide the back-up power for up to 2,326 circuits of 1.3 dial tone lines each.

One fully equipped fiber terminating bay has a material price of [REDACTED]. The maximum capacity of the bay is 1,440 fibers. If forty-eight of those fibers are used, the prorated investment is [REDACTED] x [REDACTED] = [REDACTED]

BroadBand Technologies Video Path: HDT not in Telephone Company Central Office

| Product Description | Units Needed | Unit Price | Service Capacity |
|--|--------------|------------|------------------|
| Lightguide Terminating Equipment NT FTE | 1 | [REDACTED] | 101187.96 |

Note:

When the forty-eight fibers associated with the voice path are used, then $1,440 - 48 = 1,392$ can be used for the video path. For every four fibers, 290 circuits can be provided through the HDT. Therefore, 1,392 fibers can theoretically provide 101,188 circuits.

One fully equipped fiber terminating bay has a material price of [REDACTED]. The maximum capacity of the bay is 1,440 fibers. If 1,392 of those fibers are used, the prorated investment is [REDACTED] x [REDACTED] = [REDACTED]

* Vendor Quote

BROADCAST WEIGHTING

BROADCAST HDT-CO HDT-REM WGT

CO/REM % 0.0962 0.9038 100.00

HDT

| | | |
|------------|------------|------------|
| [REDACTED] | [REDACTED] | [REDACTED] |
| 69.57 | 69.57 | 69.57 |
| 280.20 | 280.20 | 280.20 |
| 0.00 | 94.52 | 85.43 |
| [REDACTED] | [REDACTED] | [REDACTED] |
| 370.90 | 466.07 | 456.91 |

Optical Network Unit Location: Video Plus Dial Tone

| Product Description | Units Needed | Unit Price* | Total Material Price | Maximum Service Capacity | Utilization |
|--|--------------|-------------|----------------------|--------------------------|-------------|
| Broadband Controller (BBC) Card BBC CARD | 1 | [REDACTED] | [REDACTED] | 8 | 84% |
| Power Supply/Test (PST) Card PST 1101 CARD | 1 | [REDACTED] | [REDACTED] | 8 | 84% |
| Service Definition Module (SDM) Card SP SDM 1002 CARD | 3 | [REDACTED] | [REDACTED] | 8 | 73% |
| Aerial or Above Ground Assembly FLX 1100 AG PEDISTAL ASSY: or FLX POLE MOUNT ASSY: POLE MOUNT ONU ASSY (for Aerial) PEDISTAL ASSY (for Above Ground) PEDISTAL ELECTRONICS MODULE MOUNTING KIT CABLE ACCESS ENCLOSURE 2 FIBER DIB FCPC JUMPER CABLE FIBER LOCK SPLICE TRAY TERMINAL BLOCK VIDEO TERM KIT W/O SPLICE | 1 | [REDACTED] | [REDACTED] | 8 | 84% |

| | Labor Hours | Job Function Code | Labor Rate | Labor Inv. | Material Plus Labor Inv. | Investment per Pot Sub | Utilized Investment per Pot Sub |
|-------------------------------|-------------|-------------------|------------|------------|--------------------------|------------------------|---------------------------------|
| Broadband Controller (BBC) | 0.5 | 3250 | \$54.66 | \$27.33 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 0.5 | 4220 | \$50.91 | \$25.46 | [REDACTED] | [REDACTED] | [REDACTED] |
| Power Supply/Test (PST) C | 0.5 | 3250 | \$54.66 | \$27.33 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 0.5 | 4220 | \$50.91 | \$25.46 | [REDACTED] | [REDACTED] | [REDACTED] |
| Service Definition Module (S) | 0.5 | 3250 | \$54.66 | \$27.33 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 0.5 | 4220 | \$50.91 | \$25.46 | [REDACTED] | [REDACTED] | [REDACTED] |
| Aerial or Above Ground Ass | 0.5 | 3250 | \$54.66 | \$27.33 | [REDACTED] | [REDACTED] | [REDACTED] |
| | 8 | 4220 | \$50.91 | \$407.28 | [REDACTED] | [REDACTED] | [REDACTED] |
| Total: | | | | | | \$432.12 | \$535.57 |

Note:

The maximum capacity of an ONU is eight circuits. Using 6.7 of the available eight produces a utilization of 84%.
 The maximum capacity of a Service Definition Module card is four circuits. Three cards provide a maximum of twelve circuits. Using 8.7 of the available twelve produces a utilization of 73%.

* TAB N

DROP INVESTMENT

AERIAL - COMPOSITE DROP

VOICE INVESTMENT - AERIAL

| | |
|---|---------|
| (1) Twisted Wire-Price per foot | \$0.14 |
| (2) Length-Feet | 175 |
| (3) Material Price | \$24.50 |
| (4) Twisted wire-splicing .5 hr @ \$50.91/hr. | \$25.46 |
| (5) Drop Placing Assigned to Voice | \$25.99 |
| (6) Total Voice Aerial (2C) Investment: | \$75.94 |
| (7) % Aerial Drops | 67.00% |
| (8) Total Voice Aerial (2C) Invest./Home Passed | \$50.88 |
| (9) Voice Aerial- Pole Invest (1C)/Home Passed | \$5.95 |

SOURCE:

Vendor Catalog
 Dover Engineering
 Ln (1) * Ln (2)
 Outside Plant Estimate
 See Notes below
 Ln(3) + Ln (4) + Ln (5)
 Engineering Estimate
 Ln (8) * Ln (9)
 Ln (10) * Pole Factor

VIDEO INVESTMENT - AERIAL

| | |
|---|---------|
| (1) Coax-Price per foot | \$0.10 |
| (2) Length-Feet | 175 |
| (3) Material Price | \$17.50 |
| (4) Coax - splicing .25 hr @ \$50.91/hr. | \$12.73 |
| (5) Drop Placement Assigned to Video | \$18.56 |
| (6) Total Video Aerial (2C) Investment: | \$48.79 |
| (7) % Aerial Drops | 67.00% |
| (8) Total Video Aerial (2C) Invest./Home Passed | \$32.69 |
| (9) Video Aerial- Pole Invest (1C)/Home Passed | \$3.82 |

Vendor Quote
 Dover Engineering
 Ln (1) * Ln (2)
 Outside Plant Estimate
 See Notes below
 Ln(3) + Ln (4) + Ln (5)
 Engineering Estimate
 Ln (8) * Ln (9)¹
 Ln (10) * Pole Factor

NOTES:

- The composite drop contains a 5x twisted wire used for voice only and a coax wire used for video only, the ratio of material investments, as shown below, was used to apportion the composite drop placing investments.

| | | |
|---|---------|--------------------------|
| (1) Twisted wire-Price Per Foot (Voice) | \$0.14 | Vendor Catalog |
| (2) Coax-Price per foot (Video) | \$0.10 | Vendor Quote |
| (3) Allocation of Labor Costs to Voice | 58.33% | Ln (1)/(Ln (1) + Ln (2)) |
| (4) Allocation of Labor Costs to Video | 41.67% | Ln (2)/(Ln (1) + Ln (2)) |
| (5) Drop Placing (Total) .005 hr/ft*175 ft @ \$50.91/ | \$44.55 | Outside Plant Estimate |
| (6) Drop Placing Assigned to Voice | \$25.99 | Ln (5) * Ln (3) |
| (7) Drop Placing Assigned to Video | \$18.56 | Ln (5) * Ln (4) |

SOURCE: