

APPENDIX 6-5

COST ESTIMATES AND FUNDING SCENARIOS

- Bel Air Estates Sewage Collection System
- Option 1 - Limekiln Interceptor
- Option 2 - Monocacy Creek Interceptor
- Option 3 - Bel Air Estates Package Treatment Plant
- Option 4 - Bel Air Estates/Valley Road Package Plant
- Option 5 - On-Lot Community System

BEL AIR ESTATES SEWAGE COLLECTION SYSTEM

**BEL AIR ESTATES SEWAGE COLLECTION SYSTEM
AMITY TOWNSHIP SEWERAGE ALTERNATIVES
AMITY TOWNSHIP ACT 537 PLAN**

| ITEM/DESCRIPTION | AMOUNT | UNIT | UNIT COST | TOTAL COST |
|---|--------|------|-----------|------------|
| 1. 8" PVC san. sewer (0 - 8' depth) in stone roadway area | 2800 | If | 30 | 84,000 |
| 2. 8" PVC san. sewer (8' - 12' depth) in stone roadway area | 600 | If | 34 | 20,400 |
| 3. 8" PVC san. Sewer (12'+ depth) in stone roadway area | 300 | If | 40 | 12,000 |
| 4. San. Sewer manhole w/ frame & cover (0 -8' depth) | 9 | ea | 2,000 | 18,000 |
| 5. San. Sewer manhole w/ frame & cover (8' - 12' depth) | 3 | ea | 2,200 | 6,600 |
| 6. San sewer manhole w/ frame and cover (12'+ depth) | 2 | ea | 2,600 | 5,200 |
| 7. 8"x6" PVC service wyes | 35 | ea | 50 | 1,750 |
| 8. 6" PVC sewer laterals, including restoration | 420 | If | 35 | 14,700 |
| 9. Minor stream crossing, including conc. encasement | 1 | ea | 1,500 | 1,500 |
| 10. Major stream crossing, including conc. encasement | 0 | ea | 3,000 | - |
| 11. Temporary township road restoration | 3000 | If | 4 | 12,000 |
| 12. Permanent township road restoration | 3000 | If | 18 | 54,000 |
| 13. Temp and permanent township road shoulder restoration | 700 | If | 8 | 5,600 |
| 14. Hard Rock Excavation | 50 | cy | 50 | 2,500 |
| 15. Easement area restoration | 0 | If | 6 | - |
| 16. Mobilization, insurance and construction contingencies | 1 | ls | 15,000 | 15,000 |

**BEL AIR ESTATES SEWAGE COLLECTION SYSTEM CONSTRUCTION COST
ENGINEERING, LEGAL AND MISCELLANEOUS "SOFT COSTS"
BEL AIR ESTATES SEWAGE COLLECTION SYSTEM TOTAL PROJECT COST**

253,250
75,975
\$329,225

30%

**LIMEKILN ROAD INTERCEPTOR
 AMITY TOWNSHIP SEWERAGE ALTERNATIVES
 AMITY TOWNSHIP ACT 537 PLAN**

OPTION 1

OPTION 1 - LIMEKILN INTERCEPTOR

| ITEM/DESCRIPTION | AMOUNT | UNIT | UNIT COST | TOTAL COST |
|---|--------|------|-----------|------------|
| 1. 8" PVC san. sewer (0 - 8' depth) in PennDot r/w | 4500 | If | 35 | 157,500 |
| 2. 8" PVC san. sewer (8' - 12' depth) in PennDot r/w | 1100 | If | 40 | 44,000 |
| 3. 8" PVC san. Sewer (12'+ depth) in PennDot r/w | 600 | If | 48 | 28,800 |
| 4. San. Sewer manhole w/ frame & cover (0 -8' depth) | 14 | ea | 2,000 | 28,000 |
| 5. San. Sewer manhole w/ frame & cover (8' - 12' depth) | 4 | ea | 2,200 | 8,800 |
| 6. San. Sewer manhole w/ frame & cover (12'+ depth) | 2 | ea | 2,600 | 5,200 |
| 7. Sewage pumping station - submersible w/ valve pit | 1 | ls | 175,000 | 175,000 |
| 8. 6" DIP force main - benched in gravity trench | 2400 | If | 38 | 91,200 |
| 9. 8"x6" PVC service wyes | 24 | If | 50 | 1,200 |
| 10. 6" PVC sewer laterals, including restoration | 360 | If | 35 | 12,600 |
| 11. Minor stream crossing, including conc. encasement | 1 | ea | 1,500 | 1,500 |
| 12. Temporary State road pavement restoration | 400 | If | 5 | 2,000 |
| 13. Permanent State road pavement restoration | 400 | If | 22 | 8,800 |
| 14. Permanent State road shoulder restoration | 4800 | If | 12 | 57,600 |
| 15. Hard Rock Excavation | 200 | cy | 50 | 10,000 |
| 16. Easement area restoration | 200 | If | 6 | 1,200 |
| 17. Mobilization, insurance, construction contingencies | 1 | ls | 40,000 | 40,000 |

673,400
 202,020
\$875,420

30%

Limekiln Interceptor Construction Cost
 Engineering, Legal & Misc. "Soft Costs"
TOTAL PROJECT COST

Annual O&M:

| | HP | Hrs/Day | Annual Cost |
|------------------------|-----|---------|------------------------------------|
| Electricity | 7.5 | 2 | 657 |
| Inspections, ROW maint | | | 1,000 |
| | | | \$ 1,657 rounds to \$ 1,650 |

OPTION 1 - LIMEKILN INTERCEPTOR

BANK LOAN or MUNIC. BOND @ 4% FOR 10 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 4.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 63 | |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,204,645 |
| Tapping and Connection fee of | \$3,920 | \$246,960 |
| Balance to be financed (Cost-tapping fees) | | \$957,685 |
| Annual O&M | | \$1,650 |
| Annual Debt Service | | \$118,074 |
| Debt service per EDU/yr | | \$1,874 |
| Township O&M Cost | | \$12,978 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,106 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$12,978 |
| Debt Service | \$118,074 |
| Annual O&M for Project | \$1,650 |
| Total Additional Cost | \$132,702 |
| Annual Rental Cost Increase /EDU (entire Township) | \$35 |

BANK LOAN or MUNIC. BOND @ 4% FOR 20 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 4.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 63 | |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,204,645 |
| Tapping and Connection fee of | \$3,920 | \$246,960 |
| Balance to be financed (Cost-tapping fees) | | \$957,685 |
| Annual O&M for Project | | \$1,650 |
| Annual Debt Service | | \$70,468 |
| Debt service per EDU/yr | | \$1,119 |
| Township O&M Cost | | \$12,978 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,351 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$12,978 |
| Debt Service | \$70,468 |
| Annual O&M for Project | \$1,650 |
| Total Additional Cost | \$85,096 |
| Annual Rental Cost Increase /EDU (entire Township) | \$23 |

BANK LOAN or MUNIC. BOND @ 5% FOR 10 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 5.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 63 | |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,204,645 |
| Tapping and Connection fee of | \$3,920 | \$246,960 |
| Balance to be financed (Cost-tapping fees) | | \$957,685 |
| Annual O&M for Project | | \$1,650 |
| Annual Debt Service | | \$124,025 |
| Debt service per EDU/yr | | \$1,969 |
| Township O&M Cost | | \$12,978 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,201 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$12,978 |
| Debt Service | \$124,025 |
| Annual O&M for Project | \$1,650 |
| Total Additional Cost | \$138,653 |
| Annual Rental Cost Increase /EDU (entire Township) | \$37 |

BANK LOAN or MUNIC. BOND @ 5% FOR 20 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 5.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 63 | |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,204,645 |
| Tapping and Connection fee of | \$3,920 | \$246,960 |
| Balance to be financed (Cost-tapping fees) | | \$957,685 |
| Annual O&M for Project | | \$1,650 |
| Annual Debt Service | | \$76,847 |
| Debt service per EDU/yr | | \$1,220 |
| Township O&M Cost | | \$12,978 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,426 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$12,978 |
| Debt Service | \$76,847 |
| Annual O&M for Project | \$1,650 |
| Total Additional Cost | \$91,475 |
| Annual Rental Cost Increase /EDU (entire Township) | \$24 |

BANK LOAN or MUNIC. BOND @ 10% FOR 10 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 10.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 63 | |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,204,645 |
| Tapping and Connection fee of | \$3,920 | \$246,960 |
| Balance to be financed (Cost-tapping fees) | | \$957,685 |
| Annual O&M for Project | | \$1,650 |
| Annual Debt Service | | \$155,859 |
| Debt service per EDU/yr | | \$2,474 |
| Township O&M Cost | | \$12,978 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,706 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$12,978 |
| Debt Service | \$155,859 |
| Annual O&M for Project | \$1,650 |
| Total Additional Cost | \$170,487 |
| Annual Rental Cost Increase /EDU (entire Township) | \$45 |

BANK LOAN or MUNIC. BOND @ 10% FOR 20 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 10.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 63 | |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,204,645 |
| Tapping and Connection fee of | \$3,920 | \$246,960 |
| Balance to be financed (Cost-tapping fees) | | \$957,685 |
| Annual O&M for Project | | \$1,650 |
| Annual Debt Service | | \$112,489 |
| Debt service per EDU/yr | | \$1,786 |
| Township O&M Cost | | \$12,978 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,992 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$12,978 |
| Debt Service | \$112,489 |
| Annual O&M for Project | \$1,650 |
| Total Additional Cost | \$127,117 |
| Annual Rental Cost Increase /EDU (entire Township) | \$34 |

PENNVEST - 20 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|--------------|----------------|
| Assumed Grant Amount | | \$0 |
| Interest rate - PENNVEST | Years 1-5 | 1.387% |
| | Years 6-20 | 2.774% |
| | Blended Rate | 2.427% |
| Number of Years of loan period | | 20 |
| Number of EDU's | | 63 |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,204,645 |
| Tapping and Connection fee of | \$3,920 | \$246,960 |
| Balance to be financed (Cost-tap) | | \$957,685 |
| Annual O&M for Project | | \$1,650 |
| Annual Debt Service | | \$61,011 |
| Debt service per EDU/yr | | \$968 |
| Township O&M Cost | | \$12,978 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,174 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$12,978 |
| Debt Service | \$61,011 |
| Annual O&M for Project | \$1,650 |
| Total Additional Cost | \$75,639 |
| Annual Rental Cost Increase /EDU (entire Township) | \$20 |

**MONOCACY CREEK INTERCEPTOR
 AMITY TOWNSHIP SEWERAGE ALTERNATIVES
 AMITY TOWNSHIP ACT 537 PLAN**

OPTION 2

| ITEM/DESCRIPTION | AMOUNT | UNIT | UNIT COST | TOTAL COST |
|---|--------|------|-----------|------------|
| 1. 8" PVC san. sewer (0 - 8' depth) in easement area | 9000 | If | 30 | 270,000 |
| 2. 8" PVC san. sewer (8' - 12' depth) in easement area | 800 | If | 34 | 27,200 |
| 3. 8" PVC san. Sewer (12'+ depth) in easement area | 1000 | If | 40 | 40,000 |
| 4. 8" PVC san. Sewer (0 - 8' depth) in township roadway | 3300 | If | 32 | 105,600 |
| 5. San. Sewer manhole w/ frame & cover (0 -8' depth) | 36 | ea | 2,000 | 72,000 |
| 6. San. Sewer manhole w/ frame & cover (8' - 12' depth) | 9 | ea | 2,200 | 19,800 |
| 7. San sewer manhole w/ frame and cover (12'+ depth) | 4 | ea | 2,600 | 10,400 |
| 8. State highway boring w/ 18' steel casing | 200 | If | 250 | 50,000 |
| 9. 8"x6" PVC service wyes | 30 | ea | 50 | 1,500 |
| 10. 6" PVC sewer laterals, including restoration | 450 | If | 35 | 15,750 |
| 11. Minor stream crossing, including conc. encasement | 5 | ea | 1,500 | 7,500 |
| 12. Major stream crossing, including conc. encasement | 1 | ea | 3,000 | 3,000 |
| 13. Temporary State road pavement restoration | 0 | If | 5 | - |
| 14. Permanent State road pavement restoration | 0 | If | 22 | - |
| 15. Temporary township road restoration | 2000 | If | 4 | 8,000 |
| 16. Permanent township road restoration | 2000 | If | 18 | 36,000 |
| 17. Temp and permanent township road shoulder restoration | 1300 | If | 8 | 10,400 |
| 18. Hard Rock Excavation | 400 | cy | 50 | 20,000 |
| 19. Easement area clearing and demolition | 10000 | If | 4 | 40,000 |
| 20. Easement area restoration | 10000 | If | 6 | 60,000 |
| 21. Mobilization, Insurance & construction contingencies | 1 | ls | 50,000 | 50,000 |

**MONOCACY CREEK INTERCEPTOR CONSTRUCTION COST
 ENGINEERING, LEGAL AND MISC. "SOFT COSTS"
 EASEMENT PREPARATION LEGAL AND ENGINEERING FEES
 MONOCACY CREEK INTERCEPTOR CONSTRUCTION TOTAL**

847,150
 254,145
 40,000
\$1,141,295

30%

O&M:

Inspections, ROW maintenance \$ 2,000

OPTION 2 - MONOCACY CREEK INTERCEPTOR

BANK LOAN or MUNIC. BOND @ 4% FOR 10 YEARS

Total Construction cost: \$1,470,520

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 4.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 74 | |
| Total Construction Line Items | | \$847,150 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$254,145 |
| Easement Preparation & legal fees | | \$40,000 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,470,520 |
| Tapping and Connection fee of | \$3,920 | \$290,080 |
| Annual O&M for Project | | \$2,000 |
| Balance to be financed (Cost-tapping fees) | | \$1,180,440 |
| Annual Debt Service | | \$145,538 |
| Debt service per EDU/yr | | \$1,967 |
| Township O&M Cost | | \$15,244 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,200 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$15,244 |
| Annual O&M for Project | \$2,000 |
| Debt Service | \$145,538 |
| Total Additional Cost | \$162,782 |
| Annual Rental Cost Increase /EDU (entire Township) | \$43 |

BANK LOAN or MUNIC. BOND @ 4% FOR 20 YEARS

Total Construction cost: \$1,470,520

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 4.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 74 | |
| Total Construction Line Items | | \$847,150 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$254,145 |
| Easement Preparation & legal fees | | \$40,000 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,470,520 |
| Annual O&M for Project | | \$2,000 |
| Tapping and Connection fee of | \$3,920 | \$290,080 |
| Balance to be financed (Cost-tapping fees) | | \$1,180,440 |
| Annual Debt Service | | \$86,859 |
| Debt service per EDU/yr | | \$1,174 |
| Township O&M Cost | | \$15,244 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,407 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$15,244 |
| Annual O&M for Project | \$2,000 |
| Debt Service | \$86,859 |
| Total Additional Cost | \$104,103 |
| Annual Rental Cost Increase /EDU (entire Township) | \$28 |

BANK LOAN or MUNIC. BOND @ 5% FOR 10 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 5.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 74 | |
| Total Construction Line Items | | \$847,150 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$254,145 |
| Easement Preparation & legal fees | | \$40,000 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,470,520 |
| Tapping and Connection fee of | \$3,920 | \$290,080 |
| Annual O&M for Project | | \$2,000 |
| Balance to be financed (Cost-tapping fees) | | \$1,180,440 |
| Annual Debt Service | | \$152,872 |
| Debt service per EDU/yr | | \$2,066 |
| Township O&M Cost | | \$15,244 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,299 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$15,244 |
| Debt Service | \$152,872 |
| Total Additional Cost | \$168,116 |
| Annual Rental Cost Increase /EDU (entire Township) | \$45 |

BANK LOAN or MUNIC. BOND @ 5% FOR 20 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 5.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 74 | |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Easement Preparation & legal fees | | \$40,000 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,244,645 |
| Annual O&M for Project | | \$2,000 |
| Tapping and Connection fee of | \$3,920 | \$290,080 |
| Balance to be financed (Cost-tapping fees) | | \$954,565 |
| Annual Debt Service | | \$76,597 |
| Debt service per EDU/yr | | \$1,035 |
| Township O&M Cost | | \$15,244 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,268 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$15,244 |
| Annual O&M for Project | \$2,000 |
| Debt Service | \$76,597 |
| Total Additional Cost | \$93,841 |
| Annual Rental Cost Increase /EDU (entire Township) | \$25 |

PENNVEST - 20 YEARS

Total Construction cost: \$1,470,520

| | | | |
|---|--------------|---------|----------------|
| Assumed Grant Amount | | \$0 | |
| Interest rate - PENNVEST | Years 1-5 | 1.387% | |
| | Years 6-20 | 2.774% | |
| | Blended Rate | 2.427% | |
| Number of Years of loan period | | 20 | |
| Number of EDU's | | 74 | |
| Total Construction Line Items | | | \$847,150 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | | \$254,145 |
| Easement Preparation & legal fees | | | \$40,000 |
| Bel Air Estates - Collection System | | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | | \$1,470,520 |
| Annual O&M for Project | | | \$2,000 |
| Tapping and Connection fee of | | \$3,920 | \$290,080 |
| Balance to be financed (Cost-tap) | | | \$1,180,440 |
| Annual Debt Service | | | \$75,202 |
| Debt service per EDU/yr | | | \$1,016 |
| Township O&M Cost | | | \$15,244 |
| O&M Cost /EDU/yr | | | \$206 |
| Total Annual Cost per EDU | | | \$1,249 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$15,244 |
| Annual O&M for Project | \$2,000 |
| Debt Service | \$75,202 |
| Total Additional Cost | \$92,446 |
| Annual Rental Cost Increase /EDU (entire Township) | \$25 |

BANK LOAN or MUNIC. BOND @ 10% FOR 10 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 10.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 74 | |
| Total Construction Line Items | | \$847,150 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$254,145 |
| Easement Preparation & legal fees | | \$40,000 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,470,520 |
| Tapping and Connection fee of | \$3,920 | \$290,080 |
| Annual O&M for Project | | \$2,000 |
| Balance to be financed (Cost-tapping fees) | | \$1,180,440 |
| Annual Debt Service | | \$192,111 |
| Debt service per EDU/yr | | \$2,596 |
| Township O&M Cost | | \$15,244 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,829 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$15,244 |
| Debt Service | \$192,111 |
| Total Additional Cost | \$207,355 |
| Annual Rental Cost Increase /EDU (entire Township) | \$55 |

BANK LOAN or MUNIC. BOND @ 10% FOR 20 YEARS

Total Construction cost: \$1,204,645

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 10.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 74 | |
| Total Construction Line Items | | \$673,400 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$202,020 |
| Easement Preparation & legal fees | | \$40,000 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,244,645 |
| Annual O&M for Project | | \$2,000 |
| Tapping and Connection fee of | \$3,920 | \$290,080 |
| Balance to be financed (Cost-tapping fees) | | \$954,565 |
| Annual Debt Service | | \$112,123 |
| Debt service per EDU/yr | | \$1,515 |
| Township O&M Cost | | \$15,244 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,748 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$15,244 |
| Annual O&M for Project | \$2,000 |
| Debt Service | \$112,123 |
| Total Additional Cost | \$129,367 |
| Annual Rental Cost Increase /EDU (entire Township) | \$34 |

OPTION 3 - BEL AIR ESTATES PACKAGE TREATMENT PLANT

| ITEM/DESCRIPTION | AMOUNT | UNIT | UNIT COST | TOTAL COST |
|---|--------|------|-----------|------------------|
| 1. 8" PVC san. sewer (0 - 8' depth) in overland area | 600 | If | 30 | 18,000 |
| 2. 8" PVC san. sewer (8' - 12' depth) in overland area | 300 | If | 34 | 10,200 |
| 3. San. Sewer manhole w/ frame & cover (0 - 8' depth) | 3 | ea | 1,600 | 4,800 |
| 4. San. Sewer manhole w/ frame & cover (8' - 12' depth) | 1 | ea | 2,000 | 2,000 |
| 5. Sewage pumping station, submersible with valve pit | 1 | ls | 50,000 | 50,000 |
| 6. Clearing and grubbing, plant site and overland pipe | 1600 | sy | 2 | 3,200 |
| 7. STP site prep, topsoil removal, compacted sub-base and base for slab | 200 | sy | 6 | 1,200 |
| 8. Reinforced concrete tank slab, on grade, 8" thick | 10 | cy | 200 | 2,000 |
| 9. Extended aeration steel package STP, w/blowers, pumps, internal piping | 1 | ls | 60,000 | 60,000 |
| 10. Concrete block control building, 14'x18', w/ wood truss roof on slab | 1 | ls | 25,000 | 25,000 |
| 11. Interior building fit-out, incl. bathroom, work counter, utility sink, plumbing | 1 | ls | 4,000 | 4,000 |
| 12. Mechanical work, piping connections and valve installations, bldg hvac | 1 | ls | 20,000 | 20,000 |
| 13. Electrical work, service extension, cathodic protection | 1 | ls | 10,000 | 10,000 |
| 14. 8" plant outfall pipe, w/ endwall at steam | 200 | If | 30 | 6,000 |
| 15. Plant fencing, 6' high w/ barbed wire, w/ vehicular access gate | 1 | ls | 1,000 | 1,000 |
| 16. Stone parking area and access road, 6" compacted stone | 200 | If | 30 | 6,000 |
| | 180 | cy | 25 | 4,500 |
| | 1 | ls | 15,000 | 15,000 |
| BEL AIR ESTATES SEWERAGE SYSTEM SUBTOTAL | | | | 242,900 |
| ENGINEERING, LEGAL & MISC. "SOFT COSTS" | | | | 72,870 |
| BEL AIR ESTATES SEWERAGE SYSTEM TOTAL COST | | | | \$315,770 |
| | 30% | | | |

**BEL AIR ESTATES SEWAGE TREATMENT PLANT
AMITY TOWNSHIP SEWERAGE ALTERNATIVES
AMITY TOWNSHIP ACT 537 PLAN**

Conceptual Design Notes:

- 1.) Package plant to be intalled on concrete slab on-grade, due to floodplain on soil suitability concern.
- 2.) Package plant consists of a single compartmentalized tank housing processes of: equilization, sludge holding, aeration, final clarifier and chlorine contact tank. 9000gpd capacity. Tertiary treatment requirement not included. Backup power generator not included.
- 3.) Headworks influent pumping station capacity calculated as follows:
 - Average daily flow = 35 units x 250 gpd/unit = 8750gpd
 - Peak daily flow = 2.5 x 8750gpd = 17,500gpd
 - Design pumping rate = 2 x peak flow = 43,750gpd = 30.4gpm >> use 35gpm pump w/backup pump
 - Design pumping rate = 2 x peak flow = 56,000gpd = 38.9 gpd >> use 40gpm pump w/backup pump
- 4.) Above cost analysis does not include Bel Air Estates sewage collection system cost, which appears separately

Annual O&M:

| | |
|-------------------|------------------|
| Labor | 9,000 |
| Lab | 1,800 |
| Maint. | 600 |
| Electricity | 4,000 |
| Chemicals | 400 |
| Sludge handling | 1,800 |
| Supplies | 150 |
| Meter calibration | 250 |
| | <u>\$ 18,000</u> |

OPTION 3 - BEL AIR PACKAGE PLANT

BANK LOAN or MUNIC. BOND @ 4% FOR 10 YEARS

Total Construction cost: \$644,995

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 4.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$242,900 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$72,870 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$644,995 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Annual O&M for Project | | \$18,000 |
| Balance to be financed (Cost-tapping fees) | | \$507,795 |
| Annual Debt Service | | \$62,607 |
| Debt service per EDU/yr | | \$1,789 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,509 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$18,000 |
| Debt Service | \$62,607 |
| Total Additional Cost | \$87,817 |
| Annual Rental Cost Increase /EDU (entire Township) | \$24 |

BANK LOAN or MUNIC. BOND @ 4% FOR 20 YEARS

Total Construction cost: \$644,995

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 4.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$242,900 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$72,870 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$644,995 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Annual O&M for Project | | \$18,000 |
| Balance to be financed (Cost-tapping fees) | | \$507,795 |
| Annual Debt Service | | \$37,364 |
| Debt service per EDU/yr | | \$1,068 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,788 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$18,000 |
| Debt Service | \$37,364 |
| Total Additional Cost | \$62,574 |
| Annual Rental Cost Increase /EDU (entire Township) | \$17 |

BANK LOAN or MUNIC. BOND @ 5% FOR 10 YEARS

Total Construction cost: \$644,995

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 5.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$242,900 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$72,870 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$644,995 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Annual O&M for Project | | \$18,000 |
| Balance to be financed (Cost-tapping fees) | | \$507,795 |
| Annual Debt Service | | \$65,762 |
| Debt service per EDU/yr | | \$1,879 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,599 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$18,000 |
| Debt Service | \$65,762 |
| Total Additional Cost | \$90,972 |
| Annual Rental Cost Increase /EDU (entire Township) | \$24 |

BANK LOAN or MUNIC. BOND @ 5% FOR 20 YEARS

Total Construction cost: \$644,995

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 5.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$242,900 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$72,870 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$644,995 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Annual O&M for Project | | \$18,000 |
| Balance to be financed (Cost-tapping fees) | | \$507,795 |
| Annual Debt Service | | \$40,747 |
| Debt service per EDU/yr | | \$1,164 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,884 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$18,000 |
| Debt Service | \$40,747 |
| Total Additional Cost | \$65,957 |
| Annual Rental Cost Increase /EDU (entire Township) | \$18 |

BANK LOAN or MUNIC. BOND @ 10% FOR 10 YEARS

Total Construction cost: \$644,995

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 10.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$242,900 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$72,870 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$644,995 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Annual O&M for Project | | \$18,000 |
| Balance to be financed (Cost-tapping fees) | | \$507,795 |
| Annual Debt Service | | \$82,641 |
| Debt service per EDU/yr | | \$2,361 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$3,081 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$18,000 |
| Debt Service | \$82,641 |
| Total Additional Cost | \$107,851 |
| Annual Rental Cost Increase /EDU (entire Township) | \$29 |

BANK LOAN or MUNIC. BOND @ 10% FOR 20 YEARS

Total Construction cost: \$644,995

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 10.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$242,900 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$72,870 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$644,995 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Annual O&M for Project | | \$18,000 |
| Balance to be financed (Cost-tapping fees) | | \$507,795 |
| Annual Debt Service | | \$59,645 |
| Debt service per EDU/yr | | \$1,704 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,424 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$18,000 |
| Debt Service | \$59,645 |
| Total Additional Cost | \$84,855 |
| Annual Rental Cost Increase /EDU (entire Township) | \$23 |

PENNVEST - 20 YEARS

Total Construction cost: \$644,995

| | | | |
|---|--------------|---------|----------------|
| Assumed Grant Amount | | \$0 | |
| Interest rate - PENNVEST | Years 1-5 | 1.387% | |
| | Years 6-20 | 2.774% | |
| | Blended Rate | 2.427% | |
| Number of Years of loan period | | 20 | |
| Number of EDU's | | 35 | |
| Total Construction Line Items | | | \$242,900 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | | \$72,870 |
| Bel Air Estates - Collection System | | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | | \$644,995 |
| Tapping and Connection fee of | | \$3,920 | \$137,200 |
| Annual O&M for Project | | | \$0 |
| Balance to be financed (Cost-tap) | | | \$507,795 |
| Annual Debt Service | | | \$32,350 |
| Debt service per EDU/yr | | | \$924 |
| Township O&M Cost | | | \$7,210 |
| O&M Cost /EDU/yr | | | \$206 |
| Total Annual Cost per EDU | | | \$1,130 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$18,000 |
| Debt Service | \$32,350 |
| Total Additional Cost | \$57,560 |
| Annual Rental Cost Increase /EDU (entire Township) | \$15 |

OPTION 4 - BEL AIR ESTATES/VALLEY ROAD PACKAGE PLANT

OPTION 4

**BEL AIR ESTATES/VALLEY ROAD SEWAGE TREATMENT PLANT
AMITY TOWNSHIP SEWERAGE ALTERNATIVES
AMITY TOWNSHIP ACT 537 PLAN**

| ITEM/DESCRIPTION | AMOUNT | UNIT | UNIT COST | TOTAL COST |
|---|--------|------|-----------------|------------------|
| BEL AIR ESTATES SEWER INTERCEPTOR | | | | |
| 1. 8" PVC san. sewer (0 - 8' depth) in overland area | 1800 | lf | \$30 | \$54,000 |
| 2. 8" PVC san. sewer (8' - 12' depth) in overland area | 700 | lf | \$34 | \$23,800 |
| 3. San. Sewer manhole w/ frame & cover (0 - 8' depth) | 5 | ea | \$2,000 | \$10,000 |
| 4. San. Sewer manhole w/ frame & cover (8' - 12' depth) | 2 | ea | \$2,200 | \$4,400 |
| 5. Clearing and grubbing | 3300 | sy | \$2 | \$6,600 |
| 6. Seeding and restoration | 3300 | sy | \$1 | \$3,300 |
| 7. Minor stream crossing, incl conc encasement | 2 | ea | \$1,500 | \$3,000 |
| | | | SUBTOTAL | \$105,100 |

| ITEM/DESCRIPTION | AMOUNT | UNIT | UNIT COST | TOTAL COST |
|--|--------|------|-----------------|------------------|
| VALLEY ROAD SEWAGE COLLECTION SYSTEM | | | | |
| 8. 8" PVC san. sewer (0 - 8' depth) in overland area | 250 | lf | \$30 | \$7,500 |
| 9. 8" PVC san. sewer (8' - 12' depth) in overland area | 200 | lf | \$34 | \$6,800 |
| 10. 8" PVC san. Sewer (0 - 8' depth) in township roadway | 3300 | lf | \$32 | \$105,600 |
| 11. San sewer manhole w/ frame & cover (0 - 8' depth) | 12 | ea | \$2,000 | \$24,000 |
| 12. San. Sewer manhole w/ frame & cover (8' - 12' depth) | 2 | ea | \$2,200 | \$4,400 |
| 13. 8" x 6" PVC service wyes | 30 | ea | \$50 | \$1,500 |
| 14. 6" PVC sewer laterals, including restoration | 450 | ea | \$30 | \$13,500 |
| 15. Major stream crossing, including concrete encasement | 1 | ea | \$3,000 | \$3,000 |
| 16. Temporary township roadway restoration | 2000 | lf | \$4 | \$8,000 |
| 17. Permanent township roadway restoration | 2000 | lf | \$18 | \$36,000 |
| 18. Temp and permanent township shoulder restoration | 1300 | lf | \$8 | \$10,400 |
| 19. Clearing and grubbing | 500 | sy | \$2 | \$1,000 |
| 20. Seeding and restoration | 500 | sy | \$1 | \$500 |
| | | | SUBTOTAL | \$222,200 |

SEWAGE TREATMENT PLANT AND INFLUENT PUMPING STATION

| | | | | |
|---|------|----|-----------------|------------------|
| 21. Sewage pumping station, submersible with valve pit | 1 | ls | \$55,000 | \$55,000 |
| 22. Clearing and grubbing, plant site, pumping station, & access road | 1400 | sy | \$3 | \$3,500 |
| 23. STP site prep, topsoil removal, compacted sub-base and base for slab | 300 | sy | \$8 | \$2,400 |
| 24. Reinforced concrete tank slab, on grade, 8" thick | 18 | cy | \$200 | \$3,600 |
| 25. Extended aeration steel package STP, w/blowers, pumps, internal piping | 1 | ls | \$80,000 | \$80,000 |
| 26. Concrete block control building, 14'x18', w/ wood truss roof on slab | 1 | ls | \$25,000 | \$25,000 |
| 27. Interior building fit-out, incl. bathroom, work counter, utility sink, plumbing | 1 | ls | \$4,000 | \$4,000 |
| 28. Mechanical work, piping connections and valve installations, bldg hvac | 1 | ls | \$25,000 | \$25,000 |
| 29. Electrical work, service extension, cathodic protection | 1 | ls | \$12,000 | \$12,000 |
| 30. 8" plant outfall pipe, w/ endwall at steam | 200 | lf | \$30 | \$6,000 |
| 31. Outfall structure | 1 | ls | \$1,000 | \$1,000 |
| 32. Plant fencing, 6' high w/ barbed wire, w/ vehicular access gate | 320 | lf | \$12 | \$3,840 |
| 33. Stone parking area and access road, 6" compacted stone | 105 | cy | \$25 | \$2,625 |
| 34. Mobilation, insurance & construction contingencies | 1 | ls | \$15,000 | \$15,000 |
| | | | SUBTOTAL | \$223,965 |

BEL AIR ESTATES/VALLEY ROAD STP & VALLEY ROAD SEWERAGE SYSTEM SUBTOTAL
MOBILIZATION, INSURANCE, CONSTRUCTION CONTINGENCIES 30 percent
BEL AIR ESTATES/VALLEY ROAD STP & VALLEY ROAD SEWERAGE SYSTEM TOTAL COST

\$566,265
 \$169,880
\$736,145

Conceptual Design Notes:

- 1.) Package plant to be intalled on concrete slab on-grade, due to floodplain on soil suitability concern.
- 2.) Package plant consists of a single compartmentalized tank housing processes of: equalization, sludge holding, aeration, final clarifier, and chlorine contact tank. 18,000gpd capacity. Tertiary treatment requirement not included. Backup power generator not included.
 Average daily flow = 65 units x 250 gpd/unit = 16,250gpd
 Peak daily flow = 2.5 x 16,250gpd = 40,625gpd
 Design pumping rate = 2 x peak flow = 81,250gpd = 56gpm >> use 60gpm pump w/backup pump
- 4.) Above cost analysis does not include collection system cost for Bellaire Estates, which appears separately
- 5.) Above cost analysis does not include cost of easement procurement, assumed to be minimal on this alternative

Annual O&M:

| | |
|-------------------|------------------|
| Labor | 9,000 |
| Lab | 1,800 |
| Maint. | 1,200 |
| Electricity | 7,000 |
| Chemicals | 800 |
| Sludge handling | 3,600 |
| Supplies | 300 |
| Meter calibration | 300 |
| | <u>\$ 24,000</u> |

OPTION 4 - BEL AIR ESTATES & VALLEY ROAD PACKAGE PLANT

BANK LOAN or MUNIC. BOND @ 4% FOR 10 YEARS

Total Construction cost: \$1,065,370

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 4.00% | |
| Number of Years of loan period | 10 | |
| Number of EDUs | 70 | |
| Total Construction Line Items | | \$566,265 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$169,880 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,065,370 |
| Tapping and Connection fee of | \$3,920 | \$274,400 |
| Balance to be financed (Cost-tapping fees) | | \$790,970 |
| Annual O&M - Facility | | \$24,000 |
| Annual Debt Service | | \$97,519 |
| Debt service per EDU/yr | | \$1,393 |
| Township O&M Cost | | \$14,420 |
| O&M Cost /EDU/yr | | \$ 206 |
| Total Annual Cost per EDU | | \$1,942 |

| | | |
|-----------------------|-------|--------------------------|
| Total EDUs (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDUs (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$14,420 |
| Annual O&M - Facility | \$24,000 |
| Debt Service | \$97,519 |
| Total Additional Cost | \$135,939 |
| Annual Rental Cost Increase /EDU (entire Township) | \$36 |

BANK LOAN or MUNIC. BOND @ 4% FOR 20 YEARS

Total Construction cost: \$1,065,370

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 4.00% | |
| Number of Years of loan period | 20 | |
| Number of EDUs | 70 | |
| Total Construction Line Items | | \$566,265 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$169,880 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,065,370 |
| Tapping and Connection fee of | \$3,920 | \$274,400 |
| Balance to be financed (Cost-tapping fees) | | \$790,970 |
| Annual O&M - Facility | | \$24,000 |
| Annual Debt Service | | \$58,201 |
| Debt service per EDU/yr | | \$831 |
| Township O&M Cost | | \$14,420 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,380 |

| | | |
|-----------------------|-------|--------------------------|
| Total EDUs (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDUs (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$14,420 |
| Annual O&M - Facility | \$24,000 |
| Debt Service | \$58,201 |
| Total Additional Cost | \$96,621 |
| Annual Rental Cost Increase /EDU (entire Township) | \$26 |

BANK LOAN or MUNIC. BOND @ 5% FOR 10 YEARS

Total Construction cost: \$1,065,370

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 5.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 70 | |
| Total Construction Line Items | | \$566,265 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$169,880 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,065,370 |
| Tapping and Connection fee of | \$3,920 | \$274,400 |
| Balance to be financed (Cost-tapping fees) | | \$790,970 |
| Annual O&M | | \$24,000 |
| Annual Debt Service | | \$102,434 |
| Debt service per EDU/yr | | \$1,463 |
| Township O&M Cost | | \$14,420 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,012 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$14,420 |
| Annual O&M - Facility | \$24,000 |
| Debt Service | \$102,434 |
| Total Additional Cost | \$140,854 |
| Annual Rental Cost Increase /EDU (entire Township) | \$37 |

BANK LOAN or MUNIC. BOND @ 5% FOR 20 YEARS

Total Construction cost: \$1,065,370

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 5.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 70 | |
| Total Construction Line Items | | \$566,265 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$169,880 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,065,370 |
| Tapping and Connection fee of | \$3,920 | \$274,400 |
| Balance to be financed (Cost-tapping fees) | | \$790,970 |
| Annual O&M | | \$24,000 |
| Annual Debt Service | | \$63,469 |
| Debt service per EDU/yr | | \$907 |
| Township O&M Cost | | \$14,420 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,456 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$14,420 |
| Annual O&M - Facility | \$24,000 |
| Debt Service | \$63,469 |
| Total Additional Cost | \$101,889 |
| Annual Rental Cost Increase /EDU (entire Township) | \$27 |

BANK LOAN or MUNIC. BOND @ 10% FOR 10 YEARS

Total Construction cost: \$1,065,370

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 10.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 70 | |
| Total Construction Line Items | | \$566,265 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$169,880 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,065,370 |
| Tapping and Connection fee of | \$3,920 | \$274,400 |
| Balance to be financed (Cost-tapping fees) | | \$790,970 |
| Annual O&M - Facility | | \$24,000 |
| Annual Debt Service | | \$128,727 |
| Debt service per EDU/yr | | \$1,839 |
| Township O&M Cost | | \$14,420 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,388 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$14,420 |
| Annual O&M - Facility | \$24,000 |
| Debt Service | \$128,727 |
| Total Additional Cost | \$167,147 |
| Annual Rental Cost Increase /EDU (entire Township) | \$44 |

BANK LOAN or MUNIC. BOND @ 10% FOR 20 YEARS

Total Construction cost: \$1,065,370

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 10.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 70 | |
| Total Construction Line Items | | \$566,265 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$169,880 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$1,065,370 |
| Tapping and Connection fee of | \$3,920 | \$274,400 |
| Balance to be financed (Cost-tapping fees) | | \$790,970 |
| Annual O&M - Facility | | \$24,000 |
| Annual Debt Service | | \$92,907 |
| Debt service per EDU/yr | | \$1,327 |
| Township O&M Cost | | \$14,420 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,876 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$14,420 |
| Annual O&M - Facility | \$24,000 |
| Debt Service | \$92,907 |
| Total Additional Cost | \$131,327 |
| Annual Rental Cost Increase /EDU (entire Township) | \$35 |

PENNVEST - 20 YEARS

Total Construction cost: \$1,065,370

| | | | |
|---|--------------|---------|----------------|
| Assumed Grant Amount | | \$0 | |
| Interest rate - PENNVEST | Years 1-5 | 1.387% | |
| | Years 6-20 | 2.774% | |
| | Blended Rate | 2.427% | |
| Number of Years of loan period | | 20 | |
| Number of EDU's | | 70 | |
| Total Construction Line Items | | | \$566,265 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | | \$169,880 |
| Bel Air Estates - Collection System | | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | | \$1,065,370 |
| Tapping and Connection fee of | | \$3,920 | \$274,400 |
| Balance to be financed (Cost-tap) | | | \$790,970 |
| Annual O&M - Facility | | | \$24,000 |
| Annual Debt Service | | | \$50,390 |
| Debt service per EDU/yr | | | \$720 |
| Township O&M Cost | | | \$14,420 |
| O&M Cost /EDU/yr | | | \$206 |
| Total Annual Cost per EDU | | | \$1,269 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$14,420 |
| Annual O&M - Facility | \$24,000 |
| Debt Service | \$50,390 |
| Total Additional Cost | \$88,810 |
| Annual Rental Cost Increase /EDU (entire Township) | \$24 |

**BEL AIR ESTATES COMMUNITY ON-LOT SEWAGE DISPOSAL SYSTEM
 AMITY TOWNSHIP SEWERAGE ALTERNATIVES
 AMITY TOWNSHIP ACT 537 PLAN**

OPTION 5

| ITEM/DESCRIPTION | AMOUNT | UNIT | UNIT COST | TOTAL COST |
|---|--------|------|-----------|------------|
| 1. 8" PVC san. sewer (0 - 8' depth) in overland area | 500 | lf | \$30 | \$15,000 |
| 2. San. Sewer manhole w/ frame & cover (0 -8' depth) | 2 | ea | \$2,000 | \$4,000 |
| 3. Septic tanks in series, 1750 gal w/ connecting piping & extension to grade | 3 | ea | \$4,000 | \$12,000 |
| 4. Sewage pumping station/dosing tank, w/ valve pit & motorized bull valve | 1 | ls | \$40,000 | \$40,000 |
| 5. Electrical work, service extension and hookup | 1 | ls | \$3,000 | \$3,000 |
| 6. 2-1/2" PVC force main to sand mounds, w/ check valves and fittings | 500 | lf | \$15 | \$7,500 |
| 7. Clearing and grubbing, absorption field areas | 4500 | sy | \$2 | \$9,000 |
| 8. Elevated sand mounds, 10,000sf each, w/ piping, cleanouts, & cover | 4 | ea | \$15,000 | \$60,000 |
| 9. Site restoration and seeding | 6000 | cy | \$1 | \$6,000 |
| 10. Stone parking area and access road, 6" compacted stone | 100 | cy | \$25 | \$2,500 |
| | 1 | ls | \$10,000 | \$10,000 |

**BEL AIR ESTATES COMMUNITY ON-LOT SYSTEM CONSTRUCTION COSTS
 ENGINEERING, LEGAL & MISC. "SOFT COSTS"
 BELLAIRE ESTATES COMMUNITY ON-LOT SYSTEM TOTAL PROJECT COST**

\$169,000
 \$50,700
\$219,700

30 percent

Conceptual Design Notes:

- 1.) Septic tanks to be fitted with manhole section extensions to grade.
- 2.) Dosing tank to be deep installation, 6' diameter concrete tank w/ 2 pumps and anti-flotation. Bull valve to be motorized to alternate drain fields for dosing. Locking aluminum access hatch and cast-in steps to be provided.
- 3.) Percolation rate assumed to be 60 minutes per inch, based on available soils data (no perc test performed).
- 4.) Elevated sand mound total area of 40,000 square feet calculated based on assumed percolation rate.
- 5.) This alternative assumes soil suitability to support on-lot system based on DEP chapter 71 and 73 criteria

O&M Assumptions:

| | HP | Hrs/Day | Annual Cost |
|----------------|----|---------|------------------------------------|
| Electricity | 2 | 6 | 526 |
| Sludge pumping | | | 1,000 |
| | | | \$ 1,526 rounded to \$1,525 |

OPTION 5 - COMMUNITY ON-LOT SYSTEM

BANK LOAN or MUNIC. BOND @ 4% FOR 10 YEARS

Total Construction cost: \$548,925

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 4.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$169,000 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$50,700 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$548,925 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Balance to be financed (Cost-tapping fees) | | \$411,725 |
| Annual O&M for Project | | \$1,525 |
| Annual Debt Service | | \$50,762 |
| Debt service per EDU/yr | | \$1,450 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,700 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost (\$1,051/EDU/yr) | \$7,210 |
| Annual O&M for Project | |
| Debt Service | \$50,762 |
| Total Additional Cost | \$57,972 |
| Annual Rental Cost Increase /EDU (entire Township) | \$16 |

BANK LOAN or MUNIC. BOND @ 4% FOR 20 YEARS

Total Construction cost: \$548,925

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 4.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$169,000 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$50,700 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$548,925 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Balance to be financed (Cost-tapping fees) | | \$411,725 |
| Annual O&M for Project | | \$1,525 |
| Annual Debt Service | | \$30,295 |
| Debt service per EDU/yr | | \$866 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,115 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost (\$1,051/EDU/yr) | \$7,210 |
| Annual O&M for Project | \$1,525 |
| Debt Service | \$30,295 |
| Total Additional Cost | \$39,030 |
| Annual Rental Cost Increase /EDU (entire Township) | \$10 |

BANK LOAN or MUNIC. BOND @ 5% FOR 10 YEARS

Total Construction cost: \$548,925

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 5.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$169,000 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$50,700 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$548,925 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Balance to be financed (Cost-tapping fees) | | \$411,725 |
| Annual O&M for Project | | \$1,525 |
| Annual Debt Service | | \$53,320 |
| Debt service per EDU/yr | | \$1,523 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,773 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$1,525 |
| Debt Service | \$53,320 |
| Total Additional Cost | \$62,055 |
| Annual Rental Cost Increase /EDU (entire Township) | \$17 |

BANK LOAN or MUNIC. BOND @ 5% FOR 20 YEARS

Total Construction cost: \$548,925

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 5.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$169,000 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$50,700 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$548,925 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Balance to be financed (Cost-tapping fees) | | \$411,725 |
| Annual O&M for Project | | \$1,525 |
| Annual Debt Service | | \$33,038 |
| Debt service per EDU/yr | | \$944 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,194 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$1,525 |
| Debt Service | \$33,038 |
| Total Additional Cost | \$41,773 |
| Annual Rental Cost Increase /EDU (entire Township) | \$11 |

BANK LOAN or MUNIC. BOND @ 10% FOR 10 YEARS

Total Construction cost: \$548,925

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Municipal Bond | 10.00% | |
| Number of Years of loan period | 10 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$169,000 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$50,700 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$548,925 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Balance to be financed (Cost-tapping fees) | | \$411,725 |
| Annual O&M for Project | | \$1,525 |
| Annual Debt Service | | \$67,006 |
| Debt service per EDU/yr | | \$1,914 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$2,164 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 Report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$1,525 |
| Debt Service | \$67,006 |
| Total Additional Cost | \$75,741 |
| Annual Rental Cost Increase /EDU (entire Township) | \$20 |

BANK LOAN or MUNIC. BOND @ 10% FOR 20 YEARS

Total Construction cost: \$548,925

| | | |
|---|---------|----------------|
| Assumed Grant Amount | \$0 | |
| Interest rate of Bank Loan or Municipal Bond | 10.00% | |
| Number of Years of loan period | 20 | |
| Number of EDU's | 35 | |
| Total Construction Line Items | | \$169,000 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | \$50,700 |
| Bel Air Estates - Collection System | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | \$548,925 |
| Tapping and Connection fee of | \$3,920 | \$137,200 |
| Balance to be financed (Cost-tapping fees) | | \$411,725 |
| Annual O&M for Project | | \$1,525 |
| Annual Debt Service | | \$48,361 |
| Debt service per EDU/yr | | \$1,382 |
| Township O&M Cost | | \$7,210 |
| O&M Cost /EDU/yr | | \$206 |
| Total Annual Cost per EDU | | \$1,631 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|-------------|
| Township O&M Cost (\$1,051/EDU/yr) | \$7,210 |
| Annual O&M for Project | \$1,525 |
| Debt Service | \$48,361 |
| Total Additional Cost | \$57,096 |
| Annual Rental Cost Increase /EDU (entire Township) | \$15 |

PENNVEST - 20 YEARS

Total Construction cost: \$548,925

| | | | |
|---|--------------|---------|--------------|
| Assumed Grant Amount | | \$0 | |
| Interest rate - PENNVEST | Years 1-5 | 1.387% | |
| | Years 6-20 | 2.774% | |
| | Blended Rate | 2.427% | |
| Number of Years of loan period | | 20 | |
| Number of EDU's | | 35 | |
| Total Construction Line Items | | | \$169,000 |
| Engr., Legal & Misc. "Soft Costs" (30%) | | | \$50,700 |
| Bel Air Estates - Collection System | | | \$253,250 |
| Bel Air Estates - Collection System - Engr, Legal, etc. | | | \$75,975 |
| Total Construction + Indirects + Capital Reserve Fund | | | \$548,925 |
| Tapping and Connection fee of | | \$3,920 | \$137,200 |
| Balance to be financed (Cost-tap) | | | \$411,725 |
| Annual O&M for Project | | | \$1,525 |
| Annual Debt Service | | | \$26,230 |
| Debt service per EDU/yr | | | \$749 |
| Township O&M Cost | | | \$7,210 |
| O&M Cost /EDU/yr | | | \$206 |
| Total Annual Cost per EDU | | | \$999 |

| | | |
|------------------------|-------|--------------------------|
| Total EDU's (12/31/02) | 3,343 | (from Chapter 94 report) |
| Additional - 2003 | 344 | |
| Total EDU's (12/31/03) | 3,687 | |

| | |
|---|------------|
| Township O&M Cost | \$7,210 |
| Annual O&M for Project | \$1,525 |
| Debt Service | \$26,230 |
| Total Additional Cost | \$34,965 |
| Annual Rental Cost Increase /EDU (entire Township) | \$9 |