

**CAPITAL IMPROVEMENT PROGRAM FOR FISCAL YEARS 2005 TO 2010**

**Budget**

|  | Fiscal Year        |                    |                    |                    |                  |                    | Prior Allocation    | Balance to Complete | Total Project Cost  |
|--|--------------------|--------------------|--------------------|--------------------|------------------|--------------------|---------------------|---------------------|---------------------|
|  | 2005               | 2006               | 2007               | 2008               | 2009             | 2010               |                     |                     |                     |
| <b>UTILITIES ENTERPRISE:</b>                         |                    |                    |                    |                    |                  |                    |                     |                     |                     |
| Clarifier Painting/Reconditioning                    | \$0                | \$0                | \$115,500          | \$1,040,050        | \$0              | \$0                | \$0                 | \$0                 | \$1,155,550         |
| Freedom Area Sewer Study Update                      | 0                  | 75,000             | 0                  | 0                  | 0                | 0                  | 0                   | 0                   | 75,000              |
| Freedom Wastewater Treatment Plant Upgrade           | 0                  | 111,315            | 556,574            | 679,016            | 0                | 0                  | 0                   | 0                   | 1,346,905           |
| Freedom Water Treatment Plant Upgrade and Expansion  | 0                  | 0                  | 0                  | 0                  | 0                | 0                  | 14,279,237          | 0                   | 14,279,237          |
| Freedom/Hampstead - Water Meters                     | 60,115             | 63,120             | 66,272             | 69,600             | 71,340           | 73,123             | 0                   | 1,135,155           | 1,538,725           |
| FSK Wastewater Pump Stations & Force Main            | 1,655,257          | 0                  | 0                  | 0                  | 0                | 0                  | 263,800             | 0                   | 1,919,057           |
| Gaither Road 8" Sewer Line                           | 0                  | 0                  | 23,850             | 101,500            | 0                | 1,091,546          | 0                   | 0                   | 1,216,896           |
| Gaither Road 8" Water Main                           | 0                  | 0                  | 0                  | 248,750            | 0                | 1,368,070          | 0                   | 0                   | 1,616,820           |
| Hampstead Area Sewer Study                           | 200,000            | 0                  | 0                  | 0                  | 0                | 0                  | 0                   | 0                   | 200,000             |
| Hydrant Replacement                                  | 90,550             | 90,550             | 92,820             | 92,820             | 95,150           | 95,150             | 0                   | 989,270             | 1,546,310           |
| Hydraulic Looping                                    | 279,200            | 577,150            | 0                  | 50,000             | 50,000           | 363,000            | 243,800             | 661,302             | 2,224,452           |
| Lake Forest Pumping Station Dimmonneuter (Grinder)   | 0                  | 0                  | 75,337             | 0                  | 0                | 0                  | 0                   | 0                   | 75,337              |
| New Force Main & Gravity Sewer Main to North Station | 0                  | 0                  | 43,750             | 637,500            | 0                | 0                  | 0                   | 0                   | 681,250             |
| Obrecht Road Looping                                 | 410,795            | 0                  | 0                  | 0                  | 0                | 0                  | 68,000              | 0                   | 478,795             |
| Pine Hill Wastewater Pumping Station Upgrade         | 0                  | 123,200            | 0                  | 844,910            | 0                | 0                  | 0                   | 0                   | 968,110             |
| Piney Run Wastewater Pump Station Renovation         | 0                  | 1,092,195          | 1,092,195          | 0                  | 0                | 0                  | 311,400             | 0                   | 2,495,790           |
| Pleasant Valley Backup Well                          | 0                  | 100,000            | 0                  | 0                  | 0                | 44,963             | 175,037             | 0                   | 320,000             |
| Pleasant Valley Wastewater Treatment Plant Grinder   | 42,000             | 0                  | 0                  | 0                  | 0                | 0                  | 0                   | 0                   | 42,000              |
| Poly Aluminum Chloride Facility                      | 195,000            | 630,000            | 0                  | 0                  | 0                | 0                  | 0                   | 0                   | 825,000             |
| Programmable Logic Controller                        | 0                  | 272,679            | 0                  | 0                  | 0                | 0                  | 35,900              | 0                   | 308,579             |
| Ridge Road at Stafford Court                         | 185,000            | 0                  | 0                  | 0                  | 0                | 0                  | 0                   | 0                   | 185,000             |
| Shiloh Pumping Station                               | 100,000            | 0                  | 0                  | 0                  | 0                | 0                  | 12,000              | 0                   | 112,000             |
| Snowden's Run Pumping Station Dimmonneuter (Grinder) | 0                  | 73,500             | 0                  | 0                  | 0                | 0                  | 0                   | 0                   | 73,500              |
| Sykesville Elevated Water Storage Tank #6            | 0                  | 333,550            | 1,832,137          | 0                  | 0                | 0                  | 62,000              | 0                   | 2,227,687           |
| Sykesville Wastewater Pumping Station Replacement    | 78,600             | 150,000            | 872,900            | 0                  | 0                | 0                  | 0                   | 0                   | 1,101,500           |
| Tank Painting  | 40,000             | 40,000             | 40,000             | 40,000             | 40,000           | 40,000             | 0                   | 0                   | 240,000             |
| Waste Sludge Operations                              | 0                  | 0                  | 140,428            | 459,200            | 0                | 0                  | 0                   | 0                   | 599,628             |
| <b>UTILITIES ENTERPRISE TOTAL</b>                    | <b>\$3,336,517</b> | <b>\$3,732,259</b> | <b>\$4,951,763</b> | <b>\$4,263,346</b> | <b>\$256,490</b> | <b>\$3,075,852</b> | <b>\$15,451,174</b> | <b>\$2,785,727</b>  | <b>\$37,853,128</b> |
| <b>SOURCES OF FUNDING:</b>                           |                    |                    |                    |                    |                  |                    |                     |                     |                     |
| Transfer from General Fund                           | \$72,000           | \$0                | \$0                | \$0                | \$0              | \$0                | \$263,800           | \$0                 | \$335,800           |
| Bonds  | 2,132,257          | 843,500            | 277,640            | 1,849,245          | 135,150          | 180,113            | 2,123,575           | 1,628,266           | 9,169,746           |
| Maintenance Fee                                      | 170,315            | 842,658            | 1,382,362          | 981,333            | 71,340           | 73,123             | 2,908,989           | 496,159             | 6,926,279           |
| Area Connection Charges                              | 961,945            | 2,046,101          | 3,291,761          | 1,432,768          | 50,000           | 2,822,616          | 10,154,810          | 661,302             | 21,421,303          |
| <b>UTILITIES ENTERPRISE TOTAL</b>                    | <b>\$3,336,517</b> | <b>\$3,732,259</b> | <b>\$4,951,763</b> | <b>\$4,263,346</b> | <b>\$256,490</b> | <b>\$3,075,852</b> | <b>\$15,451,174</b> | <b>\$2,785,727</b>  | <b>\$37,853,128</b> |

# Clarifier Painting/Reconditioning

Freedom Water

6364

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for reconditioning/painting of the clarifier at the Freedom District Water Treatment Plant (FDWTP). A clarifier is a large tank or basin where the water is held for a period of time during which the heavier suspended solids settle to the bottom. This clarifier has been in operation since 1978 and has never been overhauled. The clarifier must be operating to produce water, therefore this project is planned to follow the improvements to the FDWTP.

|                                    | FY 05    | FY 06    | FY 07          | FY 08            | FY 09    | FY 10    | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|----------|----------------|------------------|----------|----------|------------------|---------------------|--------------------|
| Engineering/Design                 |          |          | 115,500        |                  |          |          |                  |                     | 115,500            |
| Land Acquisition                   |          |          |                |                  |          |          |                  |                     | 0                  |
| Site Work                          |          |          |                |                  |          |          |                  |                     | 0                  |
| Construction                       |          |          |                |                  |          |          |                  |                     | 0                  |
| Equipment/Furnishings              |          |          |                | 945,500          |          |          |                  |                     | 945,500            |
| Other                              |          |          |                | 94,550           |          |          |                  |                     | 94,550             |
| <b>EXPENDITURES</b>                |          |          |                |                  |          |          |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>0</b> | <b>115,500</b> | <b>1,040,050</b> | <b>0</b> | <b>0</b> | <b>0</b>         | <b>0</b>            | <b>1,155,550</b>   |
| <b>SOURCES OF FUNDS</b>            |          |          |                |                  |          |          |                  |                     |                    |
| Transfer from General Fund         |          |          |                |                  |          |          |                  |                     | 0                  |
| Bonds                              |          |          |                | 1,013,705        |          |          |                  |                     | 1,013,705          |
| Maintenance Fee                    |          |          | 115,500        | 26,345           |          |          |                  |                     | 141,845            |
| Area Connection Charges            |          |          |                |                  |          |          |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>0</b> | <b>0</b>       | <b>0</b>         | <b>0</b> | <b>0</b> |                  |                     |                    |



# Freedom Wastewater Treatment Plant Upgrade

Freedom Sewer

Proj. #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to upgrade the Freedom Wastewater Treatment Plant. The plant currently treats an average daily flow of 3.5 MGD and would be increased to meet the Department of Planning's projection of wastewater flows in the Freedom District of 4.2 MGD average. The Maryland Environmental Service (MES) operates and manages this facility for the County. MES identified a number of components that would need upgrading or complete replacement including: grit removal system, primary clarifier, primary sludge pumps/piping, activated sludge/nitrogen removal systems, secondary clarifiers, filters, gravity thickener sludge pumps, emergency generator, sludge handling/disposal, and an infiltration and inflow (I/I) control program.

Projected operating impacts include: increased maintenance and electricity costs.

|                                    | FY 05    | FY 06          | FY 07          | FY 08          | FY 09         | FY 10         | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|----------------|----------------|----------------|---------------|---------------|------------------|---------------------|--------------------|
| Engineering/Design                 |          | 111,315        |                |                |               |               |                  |                     | 111,315            |
| Land Acquisition                   |          |                |                |                |               |               |                  |                     | 0                  |
| Site Work                          |          |                |                |                |               |               |                  |                     | 0                  |
| Construction                       |          |                | 278,287        | 278,287        |               |               |                  |                     | 556,574            |
| Equipment/Furnishings              |          |                | 278,287        | 278,287        |               |               |                  |                     | 556,574            |
| Other                              |          |                |                | 122,442        |               |               |                  |                     | 122,442            |
| <b>EXPENDITURES</b>                |          |                |                |                |               |               |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>111,315</b> | <b>556,574</b> | <b>679,016</b> | <b>0</b>      | <b>0</b>      | <b>0</b>         | <b>0</b>            | <b>1,346,905</b>   |
| <b>SOURCES OF FUNDS</b>            |          |                |                |                |               |               |                  |                     |                    |
| Transfer from General Fund         |          |                |                |                |               |               |                  |                     | 0                  |
| Bonds                              |          |                |                |                |               |               |                  |                     | 0                  |
| Maintenance Fee                    |          | 66,789         | 333,944        | 387,703        |               |               |                  |                     | 788,436            |
| Area Connection Charges            |          | 44,526         | 222,630        | 291,313        |               |               |                  |                     | 558,469            |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>0</b>       | <b>0</b>       | <b>27,760</b>  | <b>28,660</b> | <b>29,591</b> |                  |                     |                    |

# Freedom Water Treatment Plant Upgrade and Expansion

Freedom Water

6347

Kim Frock, Senior Budget Analyst (410) 386-2082

This project is funded to design and construct a 3.0 million gallon per day plant adjacent to the current Freedom Water Treatment Plant. A hydraulic analysis and site plan will be completed for the design process. The City of Baltimore owns the land and rights to the water that this plant draws upon. Negotiations will continue with the City of Baltimore for the County to: lease additional acreage for the expansion, increase the draw for more water from Liberty Reservoir and re-establish the rate for the water drawn. The watershed protection agreement was signed with the City of Baltimore during FY 03. Upgrades to the Plant include: a utilities control center, a new system to improve disinfection methods to meet stricter Environmental Protection Agency regulations and standards, an additional new clarifier for water processing and the addition of a 20" parallel water main on Obrecht Road to handle the expanded flow and distribution of the additional water capacity.

Generally, fully appropriated projects do not appear in the current Capital Improvement Program. However, due to several existing projects being consolidated during FY 04, this page is included for public information. The Solids Contact Chamber and the Freedom Water Intake Lines projects were combined with this project since all work will be done concurrently and be located at the Freedom Water Treatment Plant site. The Freedom Water Treatment Plant Upgrade and Expansion project will replace the Piney Run Water Treatment Plant project and those allocations have also been transferred into this project.

Projected operating impacts include: utility and maintenance costs.

|                                    | FY 05    | FY 06    | FY 07          | FY 08          | FY 09          | FY 10          | Prior Allocation  | Balance to Complete | Total Project Cost |
|------------------------------------|----------|----------|----------------|----------------|----------------|----------------|-------------------|---------------------|--------------------|
| Engineering/Design                 |          |          |                |                |                |                | 1,026,616         |                     | 1,026,616          |
| Land Acquisition                   |          |          |                |                |                |                |                   |                     | 0                  |
| Site Work                          |          |          |                |                |                |                |                   |                     | 0                  |
| Construction                       |          |          |                |                |                |                | 13,186,421        |                     | 13,186,421         |
| Equipment/Furnishings              |          |          |                |                |                |                |                   |                     | 0                  |
| Other                              |          |          |                |                |                |                | 66,200            |                     | 66,200             |
| <b>EXPENDITURES</b>                |          |          |                |                |                |                |                   |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>0</b> | <b>0</b>       | <b>0</b>       | <b>0</b>       | <b>0</b>       | <b>14,279,237</b> | <b>0</b>            | <b>14,279,237</b>  |
| <b>SOURCES OF FUNDS</b>            |          |          |                |                |                |                |                   |                     |                    |
| Transfer from General Fund         |          |          |                |                |                |                |                   |                     | 0                  |
| Bonds                              |          |          |                |                |                |                | 1,942,538         |                     | 1,942,538          |
| Maintenance Fee                    |          |          |                |                |                |                | 2,769,139         |                     | 2,769,139          |
| Area Connection Charges            |          |          |                |                |                |                | 9,567,560         |                     | 9,567,560          |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>0</b> | <b>130,628</b> | <b>269,093</b> | <b>279,560</b> | <b>290,462</b> |                   |                     |                    |

# Freedom/Hampstead - Water Meters

Kim Frock, Senior Budget Analyst (410) 386-2082

6311

This on-going project provides funding for the enhancement and replacement of approximately 8,300 existing meters on an average sixteen year life cycle. The enhancements will enable current staff to collect meter readings while driving by homes. Software and hardware equipment to read the meters from the vehicles will also be included.

|                                    | FY 05         | FY 06         | FY 07         | FY 08         | FY 09         | FY 10         | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|---------------------|--------------------|
| Engineering/Design                 |               |               |               |               |               |               |                  |                     | 0                  |
| Land Acquisition                   |               |               |               |               |               |               |                  |                     | 0                  |
| Site Work                          |               |               |               |               |               |               |                  |                     | 0                  |
| Construction                       |               |               |               |               |               |               |                  |                     | 0                  |
| Equipment/Furnishings              | 60,115        | 63,120        | 66,272        | 69,600        | 71,340        | 73,123        |                  | 1,135,155           | 1,538,725          |
| Other                              |               |               |               |               |               |               |                  |                     | 0                  |
| <b>EXPENDITURES</b>                |               |               |               |               |               |               |                  |                     |                    |
| <b>TOTAL</b>                       | <b>60,115</b> | <b>63,120</b> | <b>66,272</b> | <b>69,600</b> | <b>71,340</b> | <b>73,123</b> | <b>0</b>         | <b>1,135,155</b>    | <b>1,538,725</b>   |
| <b>SOURCES OF FUNDS</b>            |               |               |               |               |               |               |                  |                     |                    |
| Transfer from General Fund         |               |               |               |               |               |               |                  |                     | 0                  |
| Bonds                              |               |               |               |               |               |               |                  | 638,996             | 638,996            |
| Maintenance Fee                    | 60,115        | 63,120        | 66,272        | 69,600        | 71,340        | 73,123        |                  | 496,159             | 899,729            |
| Area Connection Charges            |               |               |               |               |               |               |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | 0             | 0             | 0             | 0             | 0             | 0             |                  |                     | 0                  |

# FSK Wastewater Pump Stations & Force Main

Kim Frock, Senior Budget Analyst (410) 386-2082

6391

This project provides funding for the design and construction of a wastewater pumping station and approximately 18,000 feet of sanitary force main. The wastewater will be pumped from existing tanks at the Francis Scott Key High School to the Union Bridge pumping station located at the Jackson Ridge development. The wastewater will then be pumped to the wastewater treatment plant on Bucher John Road for treatment.

Projected operating impacts include: personnel, utilities, maintenance and sewer usage costs.

|                                    | FY 05            | FY 06         | FY 07         | FY 08         | FY 09         | FY 10         | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|------------------|---------------|---------------|---------------|---------------|---------------|------------------|---------------------|--------------------|
| Engineering/Design                 |                  |               |               |               |               |               | 263,800          |                     | 263,800            |
| Land Acquisition                   | 5,257            |               |               |               |               |               |                  |                     | 5,257              |
| Site Work                          |                  |               |               |               |               |               |                  |                     | 0                  |
| Construction                       | 1,500,000        |               |               |               |               |               |                  |                     | 1,500,000          |
| Equipment/Furnishings              |                  |               |               |               |               |               |                  |                     | 0                  |
| Other                              | 150,000          |               |               |               |               |               |                  |                     | 150,000            |
| <b>EXPENDITURES</b>                |                  |               |               |               |               |               |                  |                     |                    |
| <b>TOTAL</b>                       | <b>1,655,257</b> | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>263,800</b>   | <b>0</b>            | <b>1,919,057</b>   |
| <b>SOURCES OF FUNDS</b>            |                  |               |               |               |               |               |                  |                     |                    |
| Transfer from General Fund         |                  |               |               |               |               |               | 263,800          |                     | 263,800            |
| Local Income Tax                   |                  |               |               |               |               |               |                  |                     | 0                  |
| Bonds                              | 1,655,257        |               |               |               |               |               |                  |                     | 1,655,257          |
| Maintenance Fee                    |                  |               |               |               |               |               |                  |                     | 0                  |
| Area Connection Charges            |                  |               |               |               |               |               |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b>         | <b>23,720</b> | <b>23,917</b> | <b>24,634</b> | <b>25,373</b> | <b>26,134</b> |                  |                     |                    |

# Gaither Road 8" Sewer Line

Freedom Sewer

6369

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for approximately 2.25 miles of 8" sewer line from Obrecht Road to the end of Patapsco Road and along Patapsco Road and Patapsco Drive to the existing pumping station. There are approximately 275 parcels that will be connected to this sewer line.

Projected operating impacts include: maintenance costs of the new sewer line.

|                                    | FY 05    | FY 06    | FY 07         | FY 08          | FY 09      | FY 10            | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|----------|---------------|----------------|------------|------------------|------------------|---------------------|--------------------|
| Engineering/Design                 |          |          |               | 92,273         |            |                  |                  |                     | 92,273             |
| Land Acquisition                   |          |          | 23,850        |                |            |                  |                  |                     | 23,850             |
| Site Work                          |          |          |               |                |            |                  |                  |                     | 0                  |
| Construction                       |          |          |               |                |            | 992,315          |                  |                     | 992,315            |
| Equipment/Furnishings              |          |          |               |                |            |                  |                  |                     | 0                  |
| Other                              |          |          |               | 9,227          |            | 99,231           |                  |                     | 108,458            |
| <b>EXPENDITURES</b>                |          |          |               |                |            |                  |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>0</b> | <b>23,850</b> | <b>101,500</b> | <b>0</b>   | <b>1,091,546</b> | <b>0</b>         | <b>0</b>            | <b>1,216,896</b>   |
| <b>SOURCES OF FUNDS</b>            |          |          |               |                |            |                  |                  |                     |                    |
| Transfer from General Fund         |          |          |               |                |            |                  |                  |                     | 0                  |
| Bonds                              |          |          |               |                |            |                  |                  |                     | 0                  |
| Maintenance Fee                    |          |          |               |                |            |                  |                  |                     | 0                  |
| Area Connection Charges            |          |          | 23,850        | 101,500        |            | 1,091,546        |                  |                     | 1,216,896          |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>0</b> | <b>0</b>      | <b>0</b>       | <b>540</b> | <b>556</b>       |                  |                     |                    |

# Gaither Road 8" Water Main

Freedom Water

6365

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for approximately 2.6 miles of 8" water line to serve existing and planned development along Gaither Road. This line would extend from Obrecht Road to the ends of Gaither Road and Patapsco Drive. There are approximately 275 parcels that will be connected to this water line.

Projected operating impacts include: maintenance costs of the new water main.

|                                    | FY 05    | FY 06    | FY 07    | FY 08          | FY 09        | FY 10            | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|----------|----------|----------------|--------------|------------------|------------------|---------------------|--------------------|
| Engineering/Design                 |          |          |          | 248,750        |              |                  |                  |                     | 248,750            |
| Land Acquisition                   |          |          |          |                |              |                  |                  |                     | 0                  |
| Site Work                          |          |          |          |                |              |                  |                  |                     | 0                  |
| Construction                       |          |          |          |                |              | 1,243,700        |                  |                     | 1,243,700          |
| Equipment/Furnishings              |          |          |          |                |              |                  |                  |                     | 0                  |
| Other                              |          |          |          |                |              | 124,370          |                  |                     | 124,370            |
| <b>EXPENDITURES</b>                |          |          |          |                |              |                  |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>0</b> | <b>0</b> | <b>248,750</b> | <b>0</b>     | <b>1,368,070</b> | <b>0</b>         | <b>0</b>            | <b>1,616,820</b>   |
| <b>SOURCES OF FUNDS</b>            |          |          |          |                |              |                  |                  |                     |                    |
| Transfer from General Fund         |          |          |          |                |              |                  |                  |                     | 0                  |
| Bonds                              |          |          |          |                |              |                  |                  |                     | 0                  |
| Maintenance Fee                    |          |          |          |                |              |                  |                  |                     | 0                  |
| Area Connection Charges            |          |          |          | 248,750        |              | 1,368,070        |                  |                     | 1,616,820          |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>       | <b>1,260</b> | <b>1,298</b>     |                  |                     |                    |

# Hampstead Area Sewer Study

Hampstead Sewer

6392

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding for the Comprehensive Sewer Study for the Hampstead service area. This study evaluates the growth of the sewer system then analyzes and addresses the potential issues of each pumping station. A five-year storm event is simulated to represent a worse case scenario to the sewer system should a pump fail and there are flooding conditions in an area. The analysis will determine if the remaining pumps and lines will be able to handle an overflow to make up for the failed pump and flooding.

|                                    | FY 05          | FY 06    | FY 07    | FY 08    | FY 09    | FY 10    | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------------|----------|----------|----------|----------|----------|------------------|---------------------|--------------------|
| Engineering/Design                 | 200,000        |          |          |          |          |          |                  |                     | 200,000            |
| Land Acquisition                   |                |          |          |          |          |          |                  |                     | 0                  |
| Site Work                          |                |          |          |          |          |          |                  |                     | 0                  |
| Construction                       |                |          |          |          |          |          |                  |                     | 0                  |
| Equipment/Furnishings              |                |          |          |          |          |          |                  |                     | 0                  |
| Other                              |                |          |          |          |          |          |                  |                     | 0                  |
| <b>EXPENDITURES</b>                |                |          |          |          |          |          |                  |                     |                    |
| <b>TOTAL</b>                       | <b>200,000</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>         | <b>0</b>            | <b>200,000</b>     |
| <b>SOURCES OF FUNDS</b>            |                |          |          |          |          |          |                  |                     |                    |
| Transfer from General Fund         |                |          |          |          |          |          |                  |                     | 0                  |
| Bonds                              | 150,000        |          |          |          |          |          |                  |                     | 150,000            |
| Maintenance Fee                    |                |          |          |          |          |          |                  |                     | 0                  |
| Area Connection Charges            | 50,000         |          |          |          |          |          |                  |                     | 50,000             |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b>       | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |                  |                     |                    |

# Hydrant Replacement

Freedom Water

6359

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides on-going funding to replace the County's 600 hydrants. The estimated useful life of these hydrants is thirty years. Some of these existing hydrants have already begun failing. Thirty of these hydrants were replaced in FY 03 and twenty-five were replaced in FY 04. The yearly allocation to this project funds approximately twenty-five hydrants each year at a cost for purchase and installation of more than \$3,600 each. Additional funding for inflation is included in FY 05, FY 07 and FY 09.

|                                    | FY 05         | FY 06         | FY 07         | FY 08         | FY 09         | FY 10         | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|---------------------|--------------------|
| Engineering/Design                 |               |               |               |               |               |               |                  |                     | 0                  |
| Land Acquisition                   |               |               |               |               |               |               |                  |                     | 0                  |
| Site Work                          |               |               |               |               |               |               |                  |                     | 0                  |
| Construction                       |               |               |               |               |               |               |                  |                     | 0                  |
| Equipment/Furnishings              | 90,550        | 90,550        | 92,820        | 92,820        | 95,150        | 95,150        |                  | 989,270             | 1,546,310          |
| Other                              |               |               |               |               |               |               |                  |                     | 0                  |
| <b>EXPENDITURES</b>                |               |               |               |               |               |               |                  |                     |                    |
| <b>TOTAL</b>                       | <b>90,550</b> | <b>90,550</b> | <b>92,820</b> | <b>92,820</b> | <b>95,150</b> | <b>95,150</b> | <b>0</b>         | <b>989,270</b>      | <b>1,546,310</b>   |
| <b>SOURCES OF FUNDS</b>            |               |               |               |               |               |               |                  |                     |                    |
| Transfer from General Fund         |               |               |               |               |               |               |                  |                     | 0                  |
| Bonds                              |               |               |               | 17,590        | 95,150        | 95,150        |                  | 989,270             | 1,197,160          |
| Maintenance Fee                    | 90,550        | 90,550        | 92,820        | 75,230        |               |               |                  |                     | 349,150            |
| Area Connection Charges            |               |               |               |               |               |               |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | 0             | 0             | 0             | 0             | 0             | 0             |                  |                     |                    |

# Hydraulic Looping

Freedom Water

6358

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding to run water mains along several southern County roads as part of an effort to provide adequate looping in the Freedom Water System. Looping mains is the joining of two dead ends in a water line. The lines that are not looped create problems of stale water, and unequal and low volume water pressure. These water pressure problems may result in damage to the system and reduce fire hydrant water pressure. The upgrade of the water line at the Springfield Hospital property from 12" to 16" for the new main constructed by the State is included in this project. New development may partially cover the cost of some projects.

This project is to be completed in the following phases:

FY 05 Hunters Crossing - Construction, Pine Knob - Land Acquisition, Sandosky Road - Construction

FY 06 Pine Knob - Construction

FY 08 Brangles Road - Design

FY 09 Brangles Road - Land Acquisition

FY10 Brangles Road - Construction

Looping to be completed beyond the CIP plan - Monroe Avenue, Bandy Avenue, Caren Drive, Emerald Valley Estates, and Enterprise Street.

Projected operating impacts include: maintenance costs of the additional lines.

|                       | FY 05   | FY 06   | FY 07 | FY 08  | FY 09  | FY 10   | Prior Allocation | Balance to Complete | Total Project Cost |
|-----------------------|---------|---------|-------|--------|--------|---------|------------------|---------------------|--------------------|
| Engineering/Design    | 82,700  |         |       | 50,000 |        |         | 61,900           |                     | 194,600            |
| Land Acquisition      | 50,000  |         |       |        | 50,000 |         |                  |                     | 100,000            |
| Site Work             |         |         |       |        |        |         |                  |                     | 0                  |
| Construction          | 115,000 | 577,150 |       |        |        | 330,000 | 130,000          | 661,302             | 1,813,452          |
| Equipment/Furnishings |         |         |       |        |        |         |                  |                     | 0                  |
| Other                 | 31,500  |         |       |        |        | 33,000  | 51,900           |                     | 116,400            |

## EXPENDITURES

|              |                |                |          |               |               |                |                |                |                  |
|--------------|----------------|----------------|----------|---------------|---------------|----------------|----------------|----------------|------------------|
| <b>TOTAL</b> | <b>279,200</b> | <b>577,150</b> | <b>0</b> | <b>50,000</b> | <b>50,000</b> | <b>363,000</b> | <b>243,800</b> | <b>661,302</b> | <b>2,224,452</b> |
|--------------|----------------|----------------|----------|---------------|---------------|----------------|----------------|----------------|------------------|

## SOURCES OF FUNDS

|                            |         |         |  |        |        |         |         |         |           |
|----------------------------|---------|---------|--|--------|--------|---------|---------|---------|-----------|
| Transfer from General Fund |         |         |  |        |        |         |         |         | 0         |
| Bonds                      |         |         |  |        |        |         |         |         | 0         |
| Maintenance Fee            |         |         |  |        |        |         |         |         | 0         |
| Area Connection Charges    | 279,200 | 577,150 |  | 50,000 | 50,000 | 363,000 | 243,800 | 661,302 | 2,224,452 |

|                                    |     |       |       |       |       |       |  |  |  |
|------------------------------------|-----|-------|-------|-------|-------|-------|--|--|--|
| <b>PROJECTED OPERATING IMPACTS</b> | 993 | 6,007 | 6,187 | 6,373 | 6,564 | 9,611 |  |  |  |
|------------------------------------|-----|-------|-------|-------|-------|-------|--|--|--|

# Lake Forest Pumping Station Dimmonneuter (Grinder)

Freedom Sewer General

Proj. #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to purchase a dimmonneuter (grinder) for the Lake Forest Pumping Station. The dimmonneuter grinds up debris into small pieces which the pumps can pass without clogging. Lake Forest is one of the County's larger pumping stations, handling 354,857 gallons of sewage a day. Currently, there is a large amount of debris which must be removed by staff from the sewage flow before entering the station to prevent clogging of the pumps. Past experience with this equipment at the Hampstead Waste Water Treatment Plant, as well as the Piney Run and Shiloh pumping stations has been very positive.

Projected operating impacts include: maintenance costs and additional electricity costs.

|                                    | FY 05    | FY 06    | FY 07         | FY 08      | FY 09      | FY 10      | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|----------|---------------|------------|------------|------------|------------------|---------------------|--------------------|
| Engineering/Design                 |          |          |               |            |            |            |                  |                     | 0                  |
| Land Acquisition                   |          |          |               |            |            |            |                  |                     | 0                  |
| Site Work                          |          |          |               |            |            |            |                  |                     | 0                  |
| Construction                       |          |          | 23,570        |            |            |            |                  |                     | 23,570             |
| Equipment/Furnishings              |          |          | 51,767        |            |            |            |                  |                     | 51,767             |
| Other                              |          |          |               |            |            |            |                  |                     | 0                  |
| <b>EXPENDITURES</b>                |          |          |               |            |            |            |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>0</b> | <b>75,337</b> | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>         | <b>0</b>            | <b>75,337</b>      |
| <b>SOURCES OF FUNDS</b>            |          |          |               |            |            |            |                  |                     |                    |
| Transfer from General Fund         |          |          |               |            |            |            |                  |                     | 0                  |
| Bonds                              |          |          | 75,337        |            |            |            |                  |                     | 75,337             |
| Maintenance Fee                    |          |          |               |            |            |            |                  |                     | 0                  |
| Area Connection Charges            |          |          |               |            |            |            |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>0</b> | <b>300</b>    | <b>309</b> | <b>318</b> | <b>328</b> |                  |                     |                    |



# Obrecht Road Looping

Freedom Water

6363

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides construction funding to address looping needs in the Obrecht Road area. The design phase is in process and those funds were appropriated in a prior year. Looping is the joining of two dead ends in a water line. Water flows terminate at dead ends creating problems of stale water, unequal water pressure and low volume water pressure. This project will be completed during the Obrecht Road Phase III reconstruction and extension project that is planned for FY 05.

Projected operating impacts include: maintenance costs for the new lines.

|                                    | FY 05          | FY 06    | FY 07    | FY 08    | FY 09    | FY 10    | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------------|----------|----------|----------|----------|----------|------------------|---------------------|--------------------|
| Engineering/Design                 |                |          |          |          |          |          | 68,000           |                     | 68,000             |
| Land Acquisition                   |                |          |          |          |          |          |                  |                     | 0                  |
| Site Work                          |                |          |          |          |          |          |                  |                     | 0                  |
| Construction                       | 357,215        |          |          |          |          |          |                  |                     | 357,215            |
| Equipment/Furnishings              |                |          |          |          |          |          |                  |                     | 0                  |
| Other                              | 53,580         |          |          |          |          |          |                  |                     | 53,580             |
| <b>EXPENDITURES</b>                |                |          |          |          |          |          |                  |                     |                    |
| <b>TOTAL</b>                       | <b>410,795</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>68,000</b>    | <b>0</b>            | <b>478,795</b>     |
| <b>SOURCES OF FUNDS</b>            |                |          |          |          |          |          |                  |                     |                    |
| Transfer from General Fund         |                |          |          |          |          |          |                  |                     | 0                  |
| Bonds                              |                |          |          |          |          |          |                  |                     | 0                  |
| Maintenance Fee                    |                |          |          |          |          |          |                  |                     | 0                  |
| Area Connection Charges            | 410,795        |          |          |          |          |          | 68,000           |                     | 478,795            |
| <b>PROJECTED OPERATING IMPACTS</b> | 0              | 3,009    | 3,099    | 3,192    | 3,288    | 3,387    |                  |                     |                    |

# Pine Hill Wastewater Pumping Station Upgrade

Freedom Sewer

6370

Kim Frock, Senior Budget Analyst (410) 386-2082

In a comprehensive study of the Freedom District wastewater collection system by Black & Veatch in July 1998 several pumping stations were identified as being potentially undersized. In the modeling of a five-year storm event, these pumping stations experienced inefficient pumping of wastewater through the system. This project provides planned funding to increase the Pine Hill Pumping Station to a capacity of 1.4 million gallons a day and to increase the force main to 8".

Projected operating impacts include: increased maintenance and electricity costs.

|                       | FY 05 | FY 06  | FY 07 | FY 08   | FY 09 | FY 10 | Prior Allocation | Balance to Complete | Total Project Cost |
|-----------------------|-------|--------|-------|---------|-------|-------|------------------|---------------------|--------------------|
| Engineering/Design    |       | 75,700 |       |         |       |       |                  |                     | 75,700             |
| Land Acquisition      |       | 47,500 |       |         |       |       |                  |                     | 47,500             |
| Site Work             |       |        |       |         |       |       |                  |                     | 0                  |
| Construction          |       |        |       | 756,900 |       |       |                  |                     | 756,900            |
| Equipment/Furnishings |       |        |       |         |       |       |                  |                     | 0                  |
| Other                 |       |        |       | 88,010  |       |       |                  |                     | 88,010             |

**EXPENDITURES**

|              |          |                |          |                |          |          |          |          |                |
|--------------|----------|----------------|----------|----------------|----------|----------|----------|----------|----------------|
| <b>TOTAL</b> | <b>0</b> | <b>123,200</b> | <b>0</b> | <b>844,910</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>968,110</b> |
|--------------|----------|----------------|----------|----------------|----------|----------|----------|----------|----------------|

**SOURCES OF FUNDS**

|                            |  |        |  |         |  |  |  |  |         |
|----------------------------|--|--------|--|---------|--|--|--|--|---------|
| Transfer from General Fund |  |        |  |         |  |  |  |  | 0       |
| Bonds                      |  |        |  |         |  |  |  |  | 0       |
| Maintenance Fee            |  | 61,600 |  | 422,455 |  |  |  |  | 484,055 |
| Area Connection Charges    |  | 61,600 |  | 422,455 |  |  |  |  | 484,055 |

|                                    |   |   |   |   |       |       |
|------------------------------------|---|---|---|---|-------|-------|
| <b>PROJECTED OPERATING IMPACTS</b> | 0 | 0 | 0 | 0 | 6,180 | 6,365 |
|------------------------------------|---|---|---|---|-------|-------|

# Piney Run Wastewater Pump Station Renovation

Freedom Sewer

6371

Kim Frock, Senior Budget Analyst (410) 386-2082

In a comprehensive study of the Freedom District wastewater collection system by Black & Veatch in July 1998 several pumping stations were identified as being potentially undersized. In the modeling of a five-year storm event, these pumping stations experienced inefficient pumping of wastewater through the system. This project provides planned funding to increase the Piney Run Pumping Station to a capacity of 17.0 million gallons a day and to increase the force main to 30".

Projected operating impacts include: increased maintenance and electricity costs.

|                                    | FY 05    | FY 06            | FY 07            | FY 08        | FY 09        | FY 10        | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|------------------|------------------|--------------|--------------|--------------|------------------|---------------------|--------------------|
| Engineering/Design                 |          |                  |                  |              |              |              | 195,800          |                     | <b>195,800</b>     |
| Land Acquisition                   |          |                  |                  |              |              |              | 115,600          |                     | <b>115,600</b>     |
| Site Work                          |          |                  |                  |              |              |              |                  |                     | <b>0</b>           |
| Construction                       |          | 978,750          | 978,750          |              |              |              |                  |                     | <b>1,957,500</b>   |
| Equipment/Furnishings              |          |                  |                  |              |              |              |                  |                     | <b>0</b>           |
| Other                              |          | 113,445          | 113,445          |              |              |              |                  |                     | <b>226,890</b>     |
| <b>EXPENDITURES</b>                |          |                  |                  |              |              |              |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>1,092,195</b> | <b>1,092,195</b> | <b>0</b>     | <b>0</b>     | <b>0</b>     | <b>311,400</b>   | <b>0</b>            | <b>2,495,790</b>   |
| <b>SOURCES OF FUNDS</b>            |          |                  |                  |              |              |              |                  |                     |                    |
| Transfer from General Fund         |          |                  |                  |              |              |              |                  |                     | <b>0</b>           |
| Bonds                              |          |                  |                  |              |              |              |                  |                     | <b>0</b>           |
| Maintenance Fee                    |          | 273,049          | 273,049          |              |              |              | 77,850           |                     | <b>623,948</b>     |
| Area Connection Charges            |          | 819,146          | 819,146          |              |              |              | 233,550          |                     | <b>1,871,842</b>   |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>0</b>         | <b>0</b>         | <b>8,850</b> | <b>9,116</b> | <b>9,389</b> |                  |                     |                    |

# Pleasant Valley Backup Well

Pleasant Valley Water

6388

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for a backup well source to the main well for Pleasant Valley that was placed in service in 2000. This well will be used as the water source for the community in the event of a failure of the main well. A site for this well has not yet been determined by the County's Bureau of Environmental Resource Management.

Projected operating impacts include: maintenance and electricity costs.

|                                    | FY 05    | FY 06          | FY 07    | FY 08    | FY 09    | FY 10         | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|----------------|----------|----------|----------|---------------|------------------|---------------------|--------------------|
| Engineering/Design                 |          |                |          |          |          |               | 35,000           |                     | 35,000             |
| Land Acquisition                   |          | 100,000        |          |          |          |               |                  |                     | 100,000            |
| Site Work                          |          |                |          |          |          |               | 20,000           |                     | 20,000             |
| Construction                       |          |                |          |          |          | 44,963        | 105,037          |                     | 150,000            |
| Equipment/Furnishings              |          |                |          |          |          |               |                  |                     | 0                  |
| Other                              |          |                |          |          |          |               | 15,000           |                     | 15,000             |
| <b>EXPENDITURES</b>                |          |                |          |          |          |               |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>100,000</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>44,963</b> | <b>175,037</b>   | <b>0</b>            | <b>320,000</b>     |
| <b>SOURCES OF FUNDS</b>            |          |                |          |          |          |               |                  |                     |                    |
| Transfer from General Fund         |          |                |          |          |          |               |                  |                     | 0                  |
| Bonds                              |          | 100,000        |          |          |          | 44,963        | 175,037          |                     | 320,000            |
| Maintenance Fee                    |          |                |          |          |          |               |                  |                     | 0                  |
| Area Connection Charges            |          |                |          |          |          |               |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>0</b>       | <b>0</b> | <b>0</b> | <b>0</b> | <b>4,162</b>  |                  |                     |                    |

# Pleasant Valley Wastewater Treatment Plant Dimmonneuter (Grinder)

Pleasant Valley WWTP

6393

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding to purchase a dimmonneuter (grinder) for the Pleasant Valley Wastewater Treatment Plant. The dimmonneuter grinds up the debris into small pieces which the pumps can pass without clogging. Pleasant Valley Wastewater Treatment Plant serves the small community of Pleasant Valley. Currently, there is debris which must be removed by staff from the sewage flow before it enters the plant to prevent clogging of the pumps. Past experience with this equipment at the Hampstead Waste Water Treatment Plant, as well as the Piney Run and Shiloh Pumping Stations has been very positive.

Projected operating impacts include: maintenance and additional electricity costs.

|                                    | FY 05         | FY 06      | FY 07      | FY 08      | FY 09      | FY 10      | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|---------------|------------|------------|------------|------------|------------|------------------|---------------------|--------------------|
| Engineering/Design                 |               |            |            |            |            |            |                  |                     | 0                  |
| Land Acquisition                   |               |            |            |            |            |            |                  |                     | 0                  |
| Site Work                          |               |            |            |            |            |            |                  |                     | 0                  |
| Construction                       |               |            |            |            |            |            |                  |                     | 0                  |
| Equipment/Furnishings              | 42,000        |            |            |            |            |            |                  |                     | 42,000             |
| Other                              |               |            |            |            |            |            |                  |                     | 0                  |
| <b>EXPENDITURES</b>                |               |            |            |            |            |            |                  |                     |                    |
| <b>TOTAL</b>                       | <b>42,000</b> | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>         | <b>0</b>            | <b>42,000</b>      |
| <b>SOURCES OF FUNDS</b>            |               |            |            |            |            |            |                  |                     |                    |
| Transfer from General Fund         |               |            |            |            |            |            |                  |                     | 0                  |
| Bonds                              | 42,000        |            |            |            |            |            |                  |                     | 42,000             |
| Maintenance Fee                    |               |            |            |            |            |            |                  |                     | 0                  |
| Area Connection Charges            |               |            |            |            |            |            |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>300</b>    | <b>309</b> | <b>318</b> | <b>328</b> | <b>338</b> | <b>348</b> |                  |                     |                    |

# Poly Aluminum Chloride Facility

Hampstead WWTP

6394

Kim Frock, Senior Budget Analyst (410) 386-2082

This project includes funding for the replacement of the existing Poly Aluminum Chloride Facility (PAC) that was placed in service in 1976 and is now beyond its useful life. The PAC facility is the storage unit for the chemicals that are used in the wastewater treatment process. The new PAC facility will be moved into a vacant building that is no longer utilized in the treatment process. The new facility will be designed for manual as well as automatic control and will comply with all current safety and system operations design criteria for storage, metering, and mixing of the chemicals for process application.

|                                    | FY 05          | FY 06          | FY 07    | FY 08    | FY 09    | FY 10    | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------------|----------------|----------|----------|----------|----------|------------------|---------------------|--------------------|
| Engineering/Design                 | 189,540        |                |          |          |          |          |                  |                     | 189,540            |
| Land Acquisition                   |                |                |          |          |          |          |                  |                     | 0                  |
| Site Work                          |                |                |          |          |          |          |                  |                     | 0                  |
| Construction                       |                | 250,000        |          |          |          |          |                  |                     | 250,000            |
| Equipment/Furnishings              |                | 236,000        |          |          |          |          |                  |                     | 236,000            |
| Other                              | 5,460          | 144,000        |          |          |          |          |                  |                     | 149,460            |
| <b>EXPENDITURES</b>                |                |                |          |          |          |          |                  |                     |                    |
| <b>TOTAL</b>                       | <b>195,000</b> | <b>630,000</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>         | <b>0</b>            | <b>825,000</b>     |
| <b>SOURCES OF FUNDS</b>            |                |                |          |          |          |          |                  |                     |                    |
| Transfer from General Fund         |                |                |          |          |          |          |                  |                     | 0                  |
| Bonds                              | 195,000        | 630,000        |          |          |          |          |                  |                     | 825,000            |
| Maintenance Fee                    |                |                |          |          |          |          |                  |                     | 0                  |
| Area Connection Charges            |                |                |          |          |          |          |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b>       | <b>0</b>       | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |                  |                     |                    |

# Programmable Logic Controller

Hampstead Sewer

6372

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to computerize many monitoring functions through a programmable logic controller. The controller will allow an operator to monitor operations such as flows and chemical mixture more quickly from a central location and would enable the operator to re-start the treatment process from any point in the treatment cycle should a problem occur.

Projected operating impacts include: utility costs.

|                                    | FY 05    | FY 06          | FY 07      | FY 08      | FY 09      | FY 10      | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|----------------|------------|------------|------------|------------|------------------|---------------------|--------------------|
| Engineering/Design                 |          |                |            |            |            |            | 35,900           |                     | <b>35,900</b>      |
| Land Acquisition                   |          |                |            |            |            |            |                  |                     | <b>0</b>           |
| Site Work                          |          |                |            |            |            |            |                  |                     | <b>0</b>           |
| Construction                       |          | 144,217        |            |            |            |            |                  |                     | <b>144,217</b>     |
| Equipment/Furnishings              |          | 100,962        |            |            |            |            |                  |                     | <b>100,962</b>     |
| Other                              |          | 27,500         |            |            |            |            |                  |                     | <b>27,500</b>      |
| <b>EXPENDITURES</b>                |          |                |            |            |            |            |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>272,679</b> | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>35,900</b>    | <b>0</b>            | <b>308,579</b>     |
| <b>SOURCES OF FUNDS</b>            |          |                |            |            |            |            |                  |                     |                    |
| Transfer from General Fund         |          |                |            |            |            |            |                  |                     | <b>0</b>           |
| Bonds                              |          |                |            |            |            |            |                  |                     | <b>0</b>           |
| Maintenance Fee                    |          |                |            |            |            |            |                  |                     | <b>0</b>           |
| Area Connection Charges            |          | 272,679        |            |            |            |            | 35,900           |                     | <b>308,579</b>     |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>360</b>     | <b>371</b> | <b>382</b> | <b>393</b> | <b>405</b> |                  |                     |                    |

# Ridge Road at Stafford Court

Kim Frock, Senior Budget Analyst (410) 386-2082

6395

This project provides funding for repairs to the intersection of Ridge Road at Stafford Court due to groundwater moving along the sewer line and undermining the road. Approximately 400 feet of material below the depth of the sewer line will be excavated and removed. The fill material and the sewer line will be replaced and the road section resurfaced. In addition to these repairs, subdrains will also be installed to prevent ground water from flowing along the sewer line and washing out fill material in the future.

|                                    | FY 05          | FY 06    | FY 07    | FY 08    | FY 09    | FY 10    | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------------|----------|----------|----------|----------|----------|------------------|---------------------|--------------------|
| Engineering/Design                 |                |          |          |          |          |          |                  |                     | 0                  |
| Land Acquisition                   |                |          |          |          |          |          |                  |                     | 0                  |
| Site Work                          |                |          |          |          |          |          |                  |                     | 0                  |
| Construction                       | 185,000        |          |          |          |          |          |                  |                     | 185,000            |
| Equipment/Furnishings              |                |          |          |          |          |          |                  |                     | 0                  |
| Other                              |                |          |          |          |          |          |                  |                     | 0                  |
| <b>EXPENDITURES</b>                |                |          |          |          |          |          |                  |                     |                    |
| <b>TOTAL</b>                       | <b>185,000</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>         | <b>0</b>            | <b>185,000</b>     |
| <b>SOURCES OF FUNDS</b>            |                |          |          |          |          |          |                  |                     |                    |
| Transfer from General Fund         | 72,000         |          |          |          |          |          |                  |                     | 72,000             |
| Bonds                              |                |          |          |          |          |          |                  |                     | 0                  |
| Maintenance Fee                    |                |          |          |          |          |          |                  |                     | 0                  |
| Area Connection Charges            | 113,000        |          |          |          |          |          |                  |                     | 113,000            |
| <b>PROJECTED OPERATING IMPACTS</b> | 0              | 0        | 0        | 0        | 0        | 0        |                  |                     |                    |

# Shiloh Pumping Station

Hampstead Sewer

6389

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding to add an additional pump, as well as associated piping, electrical wiring and controls. The station currently has two of the three planned pumps. Due to increasing flows it is necessary to proceed with the third pump to ensure capacity and guard against overflows in the event of failure of a pump.

Projected operating impacts include: maintenance and electricity costs.

|                                    | FY 05          | FY 06    | FY 07    | FY 08    | FY 09    | FY 10    | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------------|----------|----------|----------|----------|----------|------------------|---------------------|--------------------|
| Engineering/Design                 |                |          |          |          |          |          | 12,000           |                     | <b>12,000</b>      |
| Land Acquisition                   |                |          |          |          |          |          |                  |                     | <b>0</b>           |
| Site Work                          |                |          |          |          |          |          |                  |                     | <b>0</b>           |
| Construction                       | 100,000        |          |          |          |          |          |                  |                     | <b>100,000</b>     |
| Equipment/Furnishings              |                |          |          |          |          |          |                  |                     | <b>0</b>           |
| Other                              |                |          |          |          |          |          |                  |                     | <b>0</b>           |
| <b>EXPENDITURES</b>                |                |          |          |          |          |          |                  |                     |                    |
| <b>TOTAL</b>                       | <b>100,000</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>12,000</b>    | <b>0</b>            | <b>112,000</b>     |
| <b>SOURCES OF FUNDS</b>            |                |          |          |          |          |          |                  |                     |                    |
| Transfer from General Fund         |                |          |          |          |          |          |                  |                     | <b>0</b>           |
| Bonds                              | 50,000         |          |          |          |          |          | 6,000            |                     | <b>56,000</b>      |
| Maintenance Fee                    |                |          |          |          |          |          |                  |                     | <b>0</b>           |
| Area Connection Charges            | 50,000         |          |          |          |          |          | 6,000            |                     | <b>56,000</b>      |
| <b>PROJECTED OPERATING IMPACTS</b> | 2,200          | 2,266    | 2,334    | 2,404    | 2,476    | 2,550    |                  |                     |                    |

# Snowden's Run Pumping Station Dimmonneuter (Grinder)

Freedom Sewer General

Proj. #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to purchase a dimmonneuter (grinder) for the Snowden's Run pumping station. The dimmonneuter grinds the debris into small pieces which the pumps can pass without clogging. Snowden's Run is one of the County's larger pumping stations, handling 191,571 gallons of sewage a day. Currently, there is a large amount of debris which must be removed by staff from the sewage flow before entering the station to prevent clogging of the pumps. Past experience with this equipment at Hampstead Wastewater Treatment Plant, as well as the Piney Run and Shiloh pumping stations has been very positive.

Projected operating impacts include: maintenance and electricity costs.

|                                    | FY 05    | FY 06         | FY 07      | FY 08      | FY 09      | FY 10      | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|----------|---------------|------------|------------|------------|------------|------------------|---------------------|--------------------|
| Engineering/Design                 |          |               |            |            |            |            |                  |                     | 0                  |
| Land Acquisition                   |          |               |            |            |            |            |                  |                     | 0                  |
| Site Work                          |          |               |            |            |            |            |                  |                     | 0                  |
| Construction                       |          | 22,995        |            |            |            |            |                  |                     | 22,995             |
| Equipment/Furnishings              |          | 50,505        |            |            |            |            |                  |                     | 50,505             |
| Other                              |          |               |            |            |            |            |                  |                     | 0                  |
| <b>EXPENDITURES</b>                |          |               |            |            |            |            |                  |                     |                    |
| <b>TOTAL</b>                       | <b>0</b> | <b>73,500</b> | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>         | <b>0</b>            | <b>73,500</b>      |
| <b>SOURCES OF FUNDS</b>            |          |               |            |            |            |            |                  |                     |                    |
| Transfer from General Fund         |          |               |            |            |            |            |                  |                     | 0                  |
| Bonds                              |          | 73,500        |            |            |            |            |                  |                     | 73,500             |
| Maintenance Fee                    |          |               |            |            |            |            |                  |                     | 0                  |
| Area Connection Charges            |          |               |            |            |            |            |                  |                     | 0                  |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b> | <b>300</b>    | <b>309</b> | <b>318</b> | <b>328</b> | <b>338</b> |                  |                     |                    |

# Sykesville Elevated Water Storage Tank #6

Freedom Water

6390

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for a one million gallon storage tank to provide additional water capacity for the Freedom Water Area and address pressure and fire storage needs in the growing Sykesville area. The site of the storage tank has not yet been determined.

Projected operating impacts include: utility costs.

|                       | FY 05 | FY 06   | FY 07     | FY 08 | FY 09 | FY 10 | Prior Allocation | Balance to Complete | Total Project Cost |
|-----------------------|-------|---------|-----------|-------|-------|-------|------------------|---------------------|--------------------|
| Engineering/Design    |       | 333,550 |           |       |       |       |                  |                     | 333,550            |
| Land Acquisition      |       |         |           |       |       |       | 62,000           |                     | 62,000             |
| Site Work             |       |         |           |       |       |       |                  |                     | 0                  |
| Construction          |       |         | 1,707,137 |       |       |       |                  |                     | 1,707,137          |
| Equipment/Furnishings |       |         |           |       |       |       |                  |                     | 0                  |
| Other                 |       |         | 125,000   |       |       |       |                  |                     | 125,000            |

**EXPENDITURES**

|              |          |                |                  |          |          |          |               |          |                  |
|--------------|----------|----------------|------------------|----------|----------|----------|---------------|----------|------------------|
| <b>TOTAL</b> | <b>0</b> | <b>333,550</b> | <b>1,832,137</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>62,000</b> | <b>0</b> | <b>2,227,687</b> |
|--------------|----------|----------------|------------------|----------|----------|----------|---------------|----------|------------------|

**SOURCES OF FUNDS**

|                            |  |         |           |  |  |  |        |  |           |
|----------------------------|--|---------|-----------|--|--|--|--------|--|-----------|
| Transfer from General Fund |  |         |           |  |  |  |        |  | 0         |
| Bonds                      |  |         |           |  |  |  |        |  | 0         |
| Maintenance Fee            |  | 250,050 | 320,052   |  |  |  | 62,000 |  | 632,102   |
| Area Connection Charges    |  | 83,500  | 1,512,085 |  |  |  |        |  | 1,595,585 |

|                                    |   |   |     |     |     |     |
|------------------------------------|---|---|-----|-----|-----|-----|
| <b>PROJECTED OPERATING IMPACTS</b> | 0 | 0 | 900 | 927 | 955 | 983 |
|------------------------------------|---|---|-----|-----|-----|-----|

# Sykesville Wastewater Pumping Station Replacement

Freedom Sewer

6337

Kim Frock, Senior Budget Analyst (410) 386-2082

In a comprehensive study of the Freedom District wastewater collection system by Black & Veatch in July 1998, several pumping stations were identified as being potentially undersized. In the modeling of a five-year storm event, these pumping stations experienced inefficient pumping of wastewater through the system. This project provides funding to replace the current Sykesville pumping station.

Projected operating impacts include: maintenance costs, operating supplies and electricity costs.

|                       | FY 05  | FY 06   | FY 07   | FY 08 | FY 09 | FY 10 | Prior Allocation | Balance to Complete | Total Project Cost |
|-----------------------|--------|---------|---------|-------|-------|-------|------------------|---------------------|--------------------|
| Engineering/Design    | 78,600 |         |         |       |       |       |                  |                     | 78,600             |
| Land Acquisition      |        | 150,000 |         |       |       |       |                  |                     | 150,000            |
| Site Work             |        |         |         |       |       |       |                  |                     | 0                  |
| Construction          |        |         | 786,400 |       |       |       |                  |                     | 786,400            |
| Equipment/Furnishings |        |         |         |       |       |       |                  |                     | 0                  |
| Other                 |        |         | 86,500  |       |       |       |                  |                     | 86,500             |

## EXPENDITURES

|              |               |                |                |          |          |          |          |          |                  |
|--------------|---------------|----------------|----------------|----------|----------|----------|----------|----------|------------------|
| <b>TOTAL</b> | <b>78,600</b> | <b>150,000</b> | <b>872,900</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1,101,500</b> |
|--------------|---------------|----------------|----------------|----------|----------|----------|----------|----------|------------------|

## SOURCES OF FUNDS

|                            |        |         |         |  |  |  |  |  |         |
|----------------------------|--------|---------|---------|--|--|--|--|--|---------|
| Transfer from General Fund |        |         |         |  |  |  |  |  | 0       |
| Bonds                      |        |         |         |  |  |  |  |  | 0       |
| Maintenance Fee            | 19,650 | 37,500  | 180,725 |  |  |  |  |  | 237,875 |
| Area Connection Charges    | 58,950 | 112,500 | 692,175 |  |  |  |  |  | 863,625 |

## PROJECTED OPERATING IMPACTS

|  |   |   |   |       |       |       |
|--|---|---|---|-------|-------|-------|
|  | 0 | 0 | 0 | 8,700 | 8,961 | 9,230 |
|--|---|---|---|-------|-------|-------|

# Tank Painting

Kim Frock, Senior Budget Analyst (410) 386-2082

6332

This project provides on-going funding to paint water tanks. The County currently has the following tanks that were put in service: Bartholow Road - 1970; Martz Road - 1989; Bark Hill - 1993; Pleasant Valley - 1991; Linton Springs - 1998; Liberty High School - 1999; Greater Carroll Industrial Park - 1993 and a future Sykesville tank. The schedule includes painting Bartholow Road in the fall of 2004.

|                                    | FY 05         | FY 06         | FY 07         | FY 08         | FY 09         | FY 10         | Prior Allocation | Balance to Complete | Total Project Cost |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|---------------------|--------------------|
| Engineering/Design                 | 3,000         | 3,000         | 3,000         | 3,000         | 3,000         | 3,000         |                  |                     | <b>18,000</b>      |
| Land Acquisition                   |               |               |               |               |               |               |                  |                     | <b>0</b>           |
| Site Work                          | 34,000        | 34,000        | 34,000        | 34,000        | 34,000        | 34,000        |                  |                     | <b>204,000</b>     |
| Construction                       |               |               |               |               |               |               |                  |                     | <b>0</b>           |
| Equipment/Furnishings              |               |               |               |               |               |               |                  |                     | <b>0</b>           |
| Other                              | 3,000         | 3,000         | 3,000         | 3,000         | 3,000         | 3,000         |                  |                     | <b>18,000</b>      |
| <b>EXPENDITURES</b>                |               |               |               |               |               |               |                  |                     |                    |
| <b>TOTAL</b>                       | <b>40,000</b> | <b>40,000</b> | <b>40,000</b> | <b>40,000</b> | <b>40,000</b> | <b>40,000</b> | <b>0</b>         | <b>0</b>            | <b>240,000</b>     |
| <b>SOURCES OF FUNDS</b>            |               |               |               |               |               |               |                  |                     |                    |
| Transfer from General Fund         |               |               |               |               |               |               |                  |                     | <b>0</b>           |
| Bonds                              | 40,000        | 40,000        | 40,000        | 40,000        | 40,000        | 40,000        |                  |                     | <b>240,000</b>     |
| Maintenance Fee                    |               |               |               |               |               |               |                  |                     | <b>0</b>           |
| Area Connection Charges            |               |               |               |               |               |               |                  |                     | <b>0</b>           |
| <b>PROJECTED OPERATING IMPACTS</b> | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      |                  |                     |                    |

