#16 – WSSC CIP

Resolution No: 15-1021
Introduced: May 26, 2005
Adopted: May 26, 2005

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: County Council

Subject: Approval of the FY 2006-2011 Capital Improvements Program for the Washington Suburban Sanitary Commission

Background

1. As required by Article 29, Sections 7-101, 7-103 and 7-104, of the Maryland Code, before October 1 of each year, the Washington Suburban Sanitary Commission (WSSC) must prepare and submit to the County Executive and County Council of Montgomery County a 6-year Capital Improvements Program (CIP) for water and sewer facilities.

2. Article 29, Section 7-105 (d) (1) authorizes the Council to approve, disapprove, or modify the WSSC CIP.

3. Article 29, Section 7-105 (b) (1) requires that before final action on the WSSC CIP is taken, public hearings shall be held on the Program. The Council held a public hearing on the CIP on February 8, 2005.

4. The Council considered the recommendations of the Executive and the Montgomery County Planning Board of the Maryland-National Capital Park and Planning Commission with respect to the CIP and reviewed the project description forms.

5. The Council recognizes that the information and documentation contained in the CIP is an integral part of the Comprehensive Water Supply and Sewerage Systems Plan which must be submitted to the State Department of the Environment in accordance with Section 9-501 et seq. of the Environment Article of the Maryland Code.

Resolution No. 15-1021

Action

The County Council for Montgomery County, Maryland approves the following resolution for the Washington Suburban Sanitary Commission:

1. The Council approves the projects in the WSSC Proposed CIP for FY 2006-2011 except those projects which are approved as modified by the Montgomery and Prince George's County Councils. Revised project description forms for the Prince George's County projects are included in the Prince George's County resolution approving the WSSC Proposed CIP for FY 2006-2011. Amended project description forms for the Montgomery County and Bi-County projects are attached to this resolution and are identified by the following WSSC project numbers:

   S-22.06, S-22.07, S-22.08, S-22.09, S-94.11, S-126.00, W-127.01

2. The Council approves the close out of the projects in Part I.

3. The Council approves increasing reconstruction bond funding by $2.7 million for FY06. WSSC must continue to provide annual updates on the status of the reconstruction program.

4. WSSC must continue to provide annual updates on the status of the Energy Performance Program.

This is a correct copy of Council action.

Linda M. Lauer

Linda M. Lauer, Clerk of the Council

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
954811	S-22.06	Change

2. Date: October 1, 2004
Revised: May 12, 2005

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains WWTP: Liquid Train Projects, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '04	(10) Estimate FY '05	(11) Total 6 Years	(12) Year 1 FY '06	(13) Year 2 FY '07	(14) Year 3 FY '08	(15) Year 4 FY '09	(16) Year 5 FY '10	(17) Year 6 FY '11	(18) Beyond 6 Years
Planning, Design & Supervision	**26,694**	13,988	4,300	**8,208**	4,309	2,626	965	252	29	27	198
Land											
Site Improvements & Utilities											
Construction	**214,909**	124,628	30,553	**58,319**	30,617	18,655	6,859	1,789	204	195	1,409
Other	**1,029**		349	**664**	349	213	78	20	2	2	16
Total	**242,632**	**138,616**	**35,202**	**67,191**	**35,275**	**21,494**	**7,902**	**2,061**	**235**	**224**	**1,623**

C. Funding Schedule (000's)

WSSC Bonds	**188,067**	107,442	27,286	**52,081**	27,342	16,660	6,125	1,598	182	174	1,258
SDC	**41,247**	23,565	5,984	**11,422**	5,997	3,654	1,343	350	40	38	276
City of Rockville	**13,318**	7,609	1,932	**3,688**	1,936	1,180	434	113	13	12	89

D. Description & Justification

DESCRIPTION

This project includes funding for WSSC's share of Blue Plains liquid train projects for which construction began after June 30, 1993. Major projects include the following: Improvements to Primary and Secondary Treatment; Influent Screens and Grit Removal Systems Renovations; Nitrification Facility; Filtration/Disinfection Facility; Raw Wastewater Pump Stations 1 & 2; and Filtration Facility Pumping System. All facilities are sized at 370 MGD.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies

The Blue Plains Intermunicipal Agreement of 1985; the WASA Master Plan (1998); and the DC-WASA Proposed FY 2003 - FY 2012 Capital Improvement Program (10/16/03).

Specific Data

This is a continuation of the DC-WASA's upgrading of the Blue Plains Wastewater Treatment Plant.

Cost Change

The net cost increase reflects the latest estimates from DCWASA for existing sub-projects including: the addition of Phase II costs for the Grit Chamber and Primary Treatment projects, increased costs for Nitrification Facilities and decreased costs for Filtration and Disinfection.

STATUS Not Applicable

OTHER

The project scope has remained the same.
Project History: This project was first included in the FY95 CIP and includes those Blue Plains liquid side sub-projects where construction commenced after June 30, 1993. As such, these sub-projects are SDC eligible. This project, in essence, represents the "current-thinking" facility plan for Blue Plains liquid side sub-projects. The project costs shown above are derived from the DCWASA Capital & Operating Budget 10-year forecast of spending and WASA's latest project management data and fully reflect WASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF may not fully reflect the total project costs. These projects are in fact expected to continue indefinitely. It is anticipated that as new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. Prior expenditures and funding shown in Column 9 are post-Intermunicipal Agreement. The funding schedule also indicates the calculated Rockville share of the cost.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	
	Other	
Facility Costs	Maintenance	
	Debt Service	13663
Total Costs		13663
Impact on Water or Sewer Rate		30¢

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 95
Initial Cost Estimate	69,745
Cost Estimate Last FY	214,814
Present Cost Estimate	242,632
Approved Request, Last FY	24,235
Total Expenditures & Encumbrances	138,616
Approval Request FY 06	35,275
Supplemental Approval Request Current FY (05)	

G. Status Information

Land Status:	Not applicable
% Project Completion:	On-Going
Est. Completion Date:	On-Going

H. Map

Map Reference Code:

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 22.06 **Project Name: Blue Plains WWTP: Liquid Train Projects, Part 2**

COORDINATION

District of Columbia Water & Sewer Authority (responsible for design and construction.) (Biological Nutrient Removal costs are carried on WSSC Project S-22.08).

NOTE This project supports 17% Growth, 59% System Improvement and 24% Environmental Regulation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
954812	S-22.07	Change

2. Date: October 1, 2004
Revised: May 12, 2005

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains WWTP: Biosolids Management, Part 2

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '04	(10) Estimate FY '05	(11) Total 6 Years	(12) Year 1 FY '06	(13) Year 2 FY '07	(14) Year 3 FY '08	(15) Year 4 FY '09	(16) Year 5 FY '10	(17) Year 6 FY '11	(18) Beyond 6 Years
Planning, Design & Supervision	**39,167**	19,125	1,935	**17,951**	1,417	1,921	4,336	5,390	3,182	1,705	156
Land											
Site Improvements & Utilities											
Construction	**181,660**	39,251	13,749	**127,554**	10,069	13,652	30,809	38,297	22,610	12,117	1,106
Other	**1,625**		157	**1,455**	115	156	351	437	258	138	13
Total	**222,452**	**58,376**	**15,841**	**146,960**	**11,601**	**15,729**	**35,496**	**44,124**	**26,050**	**13,960**	**1,275**

C. Funding Schedule (000's)

WSSC Bonds	**172,424**	45,248	12,278	**113,910**	8,992	12,192	27,513	34,201	20,191	10,821	988
SDC	**37,817**	9,924	2,693	**24,983**	1,972	2,674	6,034	7,501	4,429	2,373	217
City of Rockville	**12,211**	3,204	870	**8,067**	637	863	1,949	2,422	1,430	766	70

D. Description & Justification

DESCRIPTION

This project includes funding for WSSC's share of the Blue Plains Wastewater Treatment Plant biosolids handling. The project scope includes only those facilities for which construction began after June 30, 1993. Major facilities include: rehabilitation of gravity thickeners; egg-shaped digestion facilities; centrifuge thickener facilities; and additional dewatering facilities. All facilities are sized at 370 MGD.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies

The Blue Plains Intermunicipal Agreement of 1985; the WASA Master Plan (1998); EPMC IV Facility Plan (CH2MHILL, 2001); and the DC-WASA Proposed FY 2003 - FY 2012 Capital Improvement Program (10/16/03).

Specific Data

This project is needed to implement a set of facilities which will provide a permanent biosolids management program for Blue Plains Sludge.

Cost Change

The net cost increase reflects the latest estimates from DCWASA for the new Egg Shaped Digesters and the addition of Phase II costs for the Gravity Thickener Upgrade project and the biolsolids building project.

STATUS Not Applicable

OTHER

The project scope has remained the same.
Project History: This project was first included in the FY95 CIP and includes those Blue Plains solids handling sub-projects where construction commenced after June 30, 1993. As such, these sub-projects are SDC eligible. The project costs shown above are derived from the DCWASA Capital & Operating Budget 10-year forecast of spending and WASA's latest project management data and fully reflect WASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF may not fully reflect the total project costs. These projects are in fact expected to continue indefinitely. Prior expenditures and funding shown in Column 9 are post-Intermunicipal Agreement. The funding schedule also indicates the calculated Rockville share of the cost.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		
	Other		
Facility Costs	Maintenance		
	Debt Service	15257	
Total Costs		15257	
Impact on Water or Sewer Rate		33¢	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 95
Initial Cost Estimate	77,296
Cost Estimate Last FY	191,529
Present Cost Estimate	222,452
Approved Request, Last FY	15,677
Total Expenditures & Encumbrances	58,376
Approval Request FY 06	11,601
Supplemental Approval Request Current FY (05)	

G. Status Information

Land Status: Not applicable
% Project Completion: On-Going
Est. Completion Date: On-Going

H. Map

Map Reference Code:

MAP NOT AVAILABLE

COORDINATION

District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 17% Growth and 83% System Improvement.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
973817	S-22.08	Change

2. Date: October 1, 2004
Revised: May 12, 2005

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains WWTP: Biological Nutrient Removal

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '04	(10) Estimate FY '05	(11) Total 6 Years	(12) Year 1 FY '06	(13) Year 2 FY '07	(14) Year 3 FY '08	(15) Year 4 FY '09	(16) Year 5 FY '10	(17) Year 6 FY '11	(18) Beyond 6 Years
Planning, Design & Supervision	**4,595**	2,408	154	**2,033**	498	981	506	48			
Land											
Site Improvements & Utilities											
Construction	**29,544**	14,010	1,091	**14,443**	3,536	6,970	3,596	341			
Other	**177**		12	**165**	40	80	41	4			
Total	**34,316**	**16,418**	**1,257**	**16,641**	**4,074**	**8,031**	**4,143**	**393**			

C. Funding Schedule (000's)

WSSC Bonds	**16,214**	7,758	594	**7,862**	1,925	3,795	1,957	185			
State Aid	**17,160**	8,209	629	**8,322**	2,037	4,016	2,072	197			
City of Rockville	**942**	451	34	**457**	112	220	114	11			

D. Description & Justification

DESCRIPTION

This project includes funding for WSSC's share of the Blue Plains Biological Nitrogen Removal Pilot Project and BNR Permanent Facility design and construction. This project is stipulated in the 1995 Consent Decree signed by the District of Columbia and the United States Department of Justice.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies

Porter, MacNamee & Seely, 1992 Study; Civil Action No. 90-163 and Civil Action No. 84-2842 JGP; the WASA Master Plan (1998); and the DC-WASA Proposed FY 2003 - FY 2012 Capital Improvement Program (10/16/03).

Specific Data

The Pilot Project was a phased, four year, half-plant trial. Portions of the nitrification basins were converted to anoxic zones and methanol added as the carbon source. The Pilot Project was not carried out for the third and fourth years as the process proved to be successful during the first two years. The Consent Decree acknowledged that applying this technology to the Blue Plains WWTP was experimental. Based on the results of the pilot project, permanent BNR facilities are being designed and constructed at Blue Plains. These facilities include modifications to the nitrification basins, methanol storage and feed facilities, a control building, addition of fine bubble diffusers, and improvements to the nitrification facilities (Phase II).

Cost Change

Cost increase reflects the latest estimate from DCWASA for improvements to reliability in future years.

STATUS Various Stages of Planning & Design

OTHER

The project scope has remained the same.
Project History: This project was first included in the FY96 CIP and represents WSSC's share of costs for Biological Nitrogen Removal (BNR) at Blue Plains. The initial cost for this project, estimated at $12.1 million, reflected only the cost of the pilot program to determine the efficacy of methanol addition for BNR. Upon successful completion of the pilot program, a consent decree required that permanent facilities were to be constructed. The expenditure schedule reflects the cost of permanent BNR facilities. Phase I and portions of Phase II are complete. The Maryland Department of the Environment (MDE) has, by agreement, committed to providing 50% grant funding in the amount shown. However, MDE has not yet agreed that all of the Phase II costs are grant eligible.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		
	Other		
Facility Costs	Maintenance		
	Debt Service	1201	09
Total Costs		1201	09
Impact on Water or Sewer Rate		3¢	09

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 96
Date First Approved	FY 96
Initial Cost Estimate	12,189
Cost Estimate Last FY	32,877
Present Cost Estimate	34,316
Approved Request, Last FY	1,743
Total Expenditures & Encumbrances	16,418
Approval Request FY 06	4,074
Supplemental Approval Request Current FY (05)	

G. Status Information

Land Status: Not applicable
% Project Completion: C-57%
Est. Completion Date: FY2008

H. Map

Map Reference Code:

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 22.08 **Project Name: Blue Plains WWTP: Biological Nutrient Removal**

COORDINATION

District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% Environmental Regulation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
023805	S-22.09	Change

2. Date: October 1, 2004
Revised: May 12, 2005

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Blue Plains WWTP: Plant Wide Projects

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '04	(10) Estimate FY '05	(11) Total 6 Years	(12) Year 1 FY '06	(13) Year 2 FY '07	(14) Year 3 FY '08	(15) Year 4 FY '09	(16) Year 5 FY '10	(17) Year 6 FY '11	(18) Beyond 6 Years
Planning, Design & Supervision	**27,805**	18,996	2,533	**6,088**	2,812	2,020	876	301	49	30	188
Land											
Site Improvements & Utilities											
Construction	**125,693**	63,113	17,998	**43,247**	19,982	14,350	6,221	2,137	346	211	1,335
Other	**713**		205	**493**	228	164	71	24	4	2	15
Total	**154,211**	**82,109**	**20,736**	**49,828**	**23,022**	**16,534**	**7,168**	**2,462**	**399**	**243**	**1,538**

C. Funding Schedule (000's)

WSSC Bonds	**119,530**	63,643	16,073	**38,621**	17,844	12,815	5,556	1,908	309	189	1,193
SDC	**28,217**	13,959	3,525	**8,472**	3,914	2,811	1,219	419	68	41	261
City of Rockville	**8,464**	4,507	1,138	**2,735**	1,264	908	393	135	22	13	84

D. Description & Justification

DESCRIPTION

This project includes funding for WSSC's share of Blue Plains plant-wide projects for which construction began after June 30,1993. Major projects include the following: Process Control Computer Systems; Additional Chemical Systems and Transmission Improvements; Electrical Power Systems Additions, Phases I and II; Alternative Disinfection Facilities; High Priority Rehabilitation Program; and Potomac Interceptor, Upper Potomac Interceptor, and Potomac Pumping Station Rehabilitations. All Blue Plains facilities are sized at 370 MGD.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies

The Blue Plains Intermunicipal Agreement of 1985; the WASA Master Plan (1998); and the DC-WASA Proposed FY 2003 - FY 2012 Capital Improvement Program (10/16/03).

Specific Data .

This is a continuation of the DC-WASA's upgrading of the Blue Plains Wastewater Treatment Plant.

Cost Change

The cost increase reflects the latest estimates from DCWASA for existing sub-projects and the addition of several new projects including Laboratory Upgrades, Blower Upgrades, Sampler System Construction, Site Perimeter Security, Rock Creek Sewage Pumping Station Rehabilitation, Potomac Interceptor Sewer, Central Office Renovation, and Process Control Computer System.

STATUS Not Applicable

OTHER

The project scope has remained the same.
Project History: This project was previously part of WSSC Project S-22.06 and was first introduced in the FY's 2002-2007 CIP.The costs included in this project are SDC eligible.The project costs shown above are derived from the DCWASA Capital & Operating Budget 10-year forecast of spending and WASA's latest project management data and fully reflect WASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF may not fully reflect the total project costs. These projects are in fact expected to continue indefinitely. It is anticipated that as new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. The funding schedule also indicates the calculated Rockville share of the cost.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		....
	Other		..
Facility Costs	Maintenance		...
	Debt Service	7751	...
Total Costs		7751	...
Impact on Water or Sewer Rate		17¢	....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 02
Initial Cost Estimate	84,650
Cost Estimate Last FY	123,745
Present Cost Estimate	154,211
Approved Request, Last FY	14,446
Total Expenditures & Encumbrances	82,109
Approval Request FY 06	23,022
Supplemental Approval Request Current FY (05)	

G. Status Information

Land Status: Not applicable
% Project Completion: On-Going
Est. Completion Date: On-Going

H. Map

Map Reference Code:

MAP NOT AVAILABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 22.09 **Project Name: Blue Plains WWTP: Plant Wide Projects**

COORDINATION

District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 17% Growth, 59% System Improvement and 24% Environmental Regulation.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
063802	S-94.11	Add

2. Date: October 1, 2004
Revised: May 12, 2005

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Damascus Centre WWPS Replacement

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Damascus & Vicinity P.A. 11

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '04	(10) Estimate FY '05	(11) Total 6 Years	(12) Year 1 FY '06	(13) Year 2 FY '07	(14) Year 3 FY '08	(15) Year 4 FY '09	(16) Year 5 FY '10	(17) Year 6 FY '11	(18) Beyond 6 Years
Planning, Design & Supervision	**50**			**50**	20	30					
Land											
Site Improvements & Utilities											
Construction	**350**			**350**		150	200				
Other	**60**			**60**	3	27	30				
Total	**460**			**460**	**23**	**207**	**230**				

C. Funding Schedule (000's)

WSSC Bonds	**460**			**460**	23	207	230				

D. Description & Justification

DESCRIPTION

This project is for the planning, design and construction of a new wastewater pumping station to replace the existing Damascus Centre WWPS.

Service Area Patuxent North Drainage Basin **Capacity** 0.29 mgd **Population** Damascus Centre Shopping Center and nearby commercial and residential areas.

JUSTIFICATION

Plans & Studies

April 6, 2004 memorandum from Brian Mosby thru Tom Heikkinen to Steve Gerwin; DG-08 Design Guideline.

Specific Data

This project is needed to replace the existing Damascus Centre WWPS, a privately built package plant that was taken over by WSSC in the 1970's. The existing station is plagued with numerous problems and design deficiencies.

Cost Change

Not applicable.

STATUS Planning

OTHER

The present project scope was developed for the FY 2006 CIP, and has an estimated total cost of $460,000. Costs shown are preliminary planning level estimates only and may change based upon site specific conditions and design constraints. The cost estimate is based on replacement of the existing station with a new station constructed to the new DG-08 Design Guideline for small wastewater pumping stations. WSSC will coordinate the replacement of the pumping station with the draft Damascus Master Plan. Land costs are included on WSSC Project S-201.00.

COORDINATION

Montgomery County Government, Maryland-National Capital Park & Planning Commission and Montgomery County Department of Environmental Protection (Draft Damascus Master Plan).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		
	Other		
Facility Costs	Maintenance		
	Debt Service	35	09
Total Costs		35	09
Impact on Water or Sewer Rate			

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 06
Date First Approved	FY 06
Initial Cost Estimate	460
Cost Estimate Last FY	
Present Cost Estimate	460
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 06	23
Supplemental Approval Request Current FY (05)	

G. Status Information

Land Status: Site not selected
% Project Completion: P-0%
Est. Completion Date: FY 2008

H. Map **Map Reference Code:**

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
804537	S-126.00	Change

2. Date: October 1, 2004
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Rock Run Sewage Treatment Facility

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Potomac-Cabin John & Vicinity P.A. 29

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '04	(10) Estimate FY '05	(11) Total 6 Years	(12) Year 1 FY '06	(13) Year 2 FY '07	(14) Year 3 FY '08	(15) Year 4 FY '09	(16) Year 5 FY '10	(17) Year 6 FY '11	(18) Beyond 6 Years
Planning, Design & Supervision	**26,047**	4,582									21,465
Land	**11,500**	11,500									
Site Improvements & Utilities											
Construction	**166,408**	254									166,154
Other	**18,762**										18,762
Total	**222,717**	**16,336**									**206,381**

C. Funding Schedule (000's)

WSSC Bonds	**16,336**	16,336									
SDC	**206,381**										206,381

DELETED

D. Description & Justification

DESCRIPTION

Further funding for this project has been deferred beyond six years pending completion of an update to the long range strategic sewerage plan. This project provides for the design and construction of a 20 MGD advanced wastewater treatment plant, located on the Avenel Farm Tract, which will treat wastewater obtained from the Dulles Interceptor and discharge the effluent at the confluence of Little Falls Branch and the Potomac River, below all permanent raw (drinking) water intakes. Approximately 950 feet of 48-inch diameter pipe will convey the influent from the Dulles Interceptor to a pumping station which will be located at the east boundary of the David Taylor Model Basin. The influent will then be pumped to the plant through 11,400 feet of 48-inch diameter force main. Approximately 21,500 feet of 27-inch and 30-inch diameter pressure pipe will convey the effluent to the Maryland Upper Potomac Interceptor near the mouth of Cabin John Creek. The 14,800 feet of existing 36-inch diameter interceptor will be converted to an effluent pipeline to carry the effluent the rest of the way to the point of discharge. Funds have been spent for tree planting and the construction of the Equestrian Center Modular Buildings and are shown in Block B, Column 9, under "Construction."

Service Area **Capacity** 20 MGD

JUSTIFICATION

Plans & Studies

Montgomery County Comprehensive Water Supply and Sewerage Systems Plan (1981 Annual Update); Maryland-National Capital Park and Planning Commission Comprehensive Staging Plan; Bi-County Sewage Treatment Capacity Agreement (December 8, 1983); Blue Plains Intermunicipal Agreement of 1985; WSSC Strategic Sewerage Study (March 1993); WSSC Seneca / Potomac Issues Report (November 1994); Montgomery County Ten-Year Comprehensive Water Supply and Sewerage Systems Plan (Approved 1999-2008 Plan).

Specific Data

This project represents the next increment of treatment capacity for WSSC in the Blue Plains service area, diverting up to 20 MGD from the Blue Plains Wastewater Treatment Plant in the District of Columbia.

Cost Change

Not applicable.

STATUS (WSSC Contract Nos. CD3641C78 , CD3641D78, , CD3641E78, , CD3641F78, , CD3641G78, , CD3641H78,).

OTHER

The project scope was first developed in FY 1981, refined in FY 1982, and now has an estimated total cost of $222,717,000. The original estimate of approximately $67 million came from the Montgomery County Mid-Term Study (1978). The scope of the study did not include detailed engineering work and produced only a rough order of magnitude cost estimate. In FY'82 a revised cost estimate of

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff	
	Other	
Facility Costs	Maintenance	
	Debt Service	1256
Total Costs		1256
Impact on Water or Sewer Rate		3¢

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 79
Date First Approved	FY 79
Initial Cost Estimate	66,860
Cost Estimate Last FY	222,717
Present Cost Estimate	222,717
Approved Request, Last FY	
Total Expenditures & Encumbrances	16,336
Approval Request FY 06	
Supplemental Approval Request Current FY (05)	

G. Status Information

Land Status:	Site acquired
% Project Completion:	Not Applicable
Est. Completion Date:	Unknown

H. Map **Map Reference Code:**

SEE ATTACHED MAP

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 126.00 **Project Name: Rock Run Sewage Treatment Facility**

$126 million was based upon the alternative selected by Montgomery County from several contained in the Rock Run AWT Project Development Report (December 1981). The present cost estimate, at $222.7 million, is derived from the Project Development Report's planning estimates based upon generalized cost curves and similar data and adjusted for inflation. A more accurate estimate, which may be considerably higher, cannot be determined until a predesign report has been completed. A predesign report will need to review the planning assumptions contained in the prior Rock Run studies and assess the feasibility of implementing the Rock Run AWT based upon updated environmental and engineering standards. Furthermore, actual project costs will be heavily dependent upon whether agreement can be reached with the National Park Service concerning the location and construction of the effluent conveyance system within the George Washington Memorial Parkway corridor and on whether it is deemed environmentally acceptable to place the effluent pipe within the Rock Run Stream Valley Park, managed by M-NCP&PC. Negotiations with the United States Department of the Navy for the rights-of-way for the influent and effluent conveyance system will also be necessary. Upon successful completion of negotiations, final design could begin. The currently planned discharge pipe would be approximately seven miles long and would run along MacArthur Boulevard for approximately three miles. The planned route would require the removal of roadside and streamside trees for most of its length. The construction area within the Rock Run Stream Valley Park would result in significant tree loss and probable stream disturbance in an area with a high value and diverse vegetative communities.

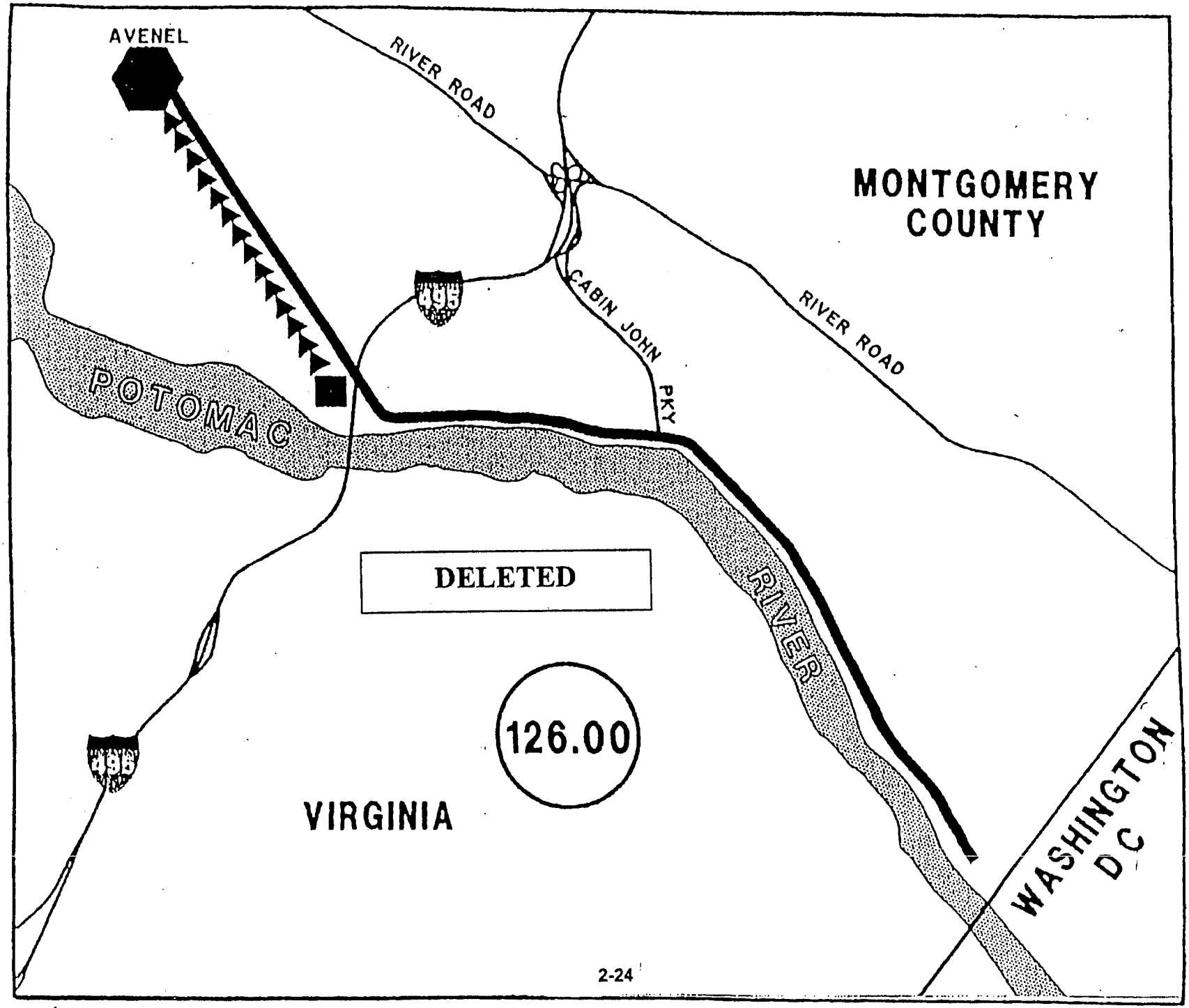
Contract "C" - Project Development Report and AWT Plant; Contract "D" - Pipeline Conveyance System; Contract "E" - Environmental Report, Contract "F" - Tree Planting; Contract "G" - Discharge Alternatives; and Contract "H" - Equestrian Center Modular Buildings. These contracts are complete.

COORDINATION

Montgomery County Government, Maryland-National Capital Park & Planning Commission (The M-NCP&PC anticipates receiving Mandatory Referral submissions from the WSSC as this project moves toward final completion of design.), National Park Service, District of Columbia Government, Maryland Department of the Environment, Interstate Commission on the Potomac River Basin, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Region III and Interagency Task Force.

NOTE This project supports 100% Growth.

DELETED


AVENEL
RIVER ROAD
MONTGOMERY COUNTY
495
CABIN JOHN PKY
RIVER ROAD
POTOMAC
DELETED
RIVER
126.00
495
VIRGINIA
WASHINGTON DC

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
934855	W-127.01	Change

2. Date: October 1, 2004
Revised: May 12, 2005

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac Bi-County Supply Main

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '04	(10) Estimate FY '05	(11) Total 6 Years	(12) Year 1 FY '06	(13) Year 2 FY '07	(14) Year 3 FY '08	(15) Year 4 FY '09	(16) Year 5 FY '10	(17) Year 6 FY '11	(18) Beyond 6 Years
Planning, Design & Supervision	**14,558**	1,700	2,010	**10,848**	6,073	2,200	750	750	750	325	
Land											
Site Improvements & Utilities											
Construction	**58,355**			**58,355**		6,864	15,000	15,000	15,000	6,491	
Other	**7,121**		201	**6,920**	607	906	1,575	1,575	1,575	682	
Total	**80,034**	**1,700**	**2,211**	**76,123**	**6,680**	**9,970**	**17,325**	**17,325**	**17,325**	**7,498**	

C. Funding Schedule (000's)

SDC	**80,034**	1,700	2,211	**76,123**	6,680	9,970	17,325	17,325	17,325	7,498	

D. Description & Justification

DESCRIPTION

This project provides for an alignment study, extensive community outreach efforts, and design and construction of approximately 30,200 feet of a proposed 84-inch diameter water main between the intersection of Tuckerman Lane and Route I-270 and the western terminus of the Bi-County Water Tunnel near the area where Rock Creek crosses the Capital Beltway (Maryland Route 495).

Service Area Montgomery Main Pressure Zone HG495, Prince George's High Pressure Zone HG450

JUSTIFICATION

Plans & Studies

Montgomery and Prince George's Main Zone Facility Plan, Black and Veatch, Inc. (October, 1990); Updated Water Demand Projections (dated April 6, 2001); and the General Plan. Technical Memoranda #1, 2, & 3 (Draft), Louis Berger & Associates (1997).

Specific Data

This project, in conjunction with the Bi-County Water Supply Improvement Project, will significantly increase transmission capacity from the Potomac Water Filtration Plant to the Montgomery County Main Zone and Prince George's County. The alignment study will decide such issues as the alignment and the method of construction (i.e., tunnel vs. open-cut).

Cost Change

Planning and design costs increased to include extensive support for community outreach and funding for both tunneling and open cut design alternatives. Construction costs have been adjusted for inflation.

STATUS Facility Planning (WSSC Contract No. BL9972A94,).

OTHER

The project scope has remained the same. The project was deferred in 1997 and reactivated in late FY2003. A pipe sleeve for the portion of the project right-of-way located on the site of the Rockledge Drive Connector was funded directly by SHA. This is an order of magnitude estimate with a confidence interval of +50% and -30%, assuming entire project is open cut. Both Councils will review the results of the detailed study and must agree upon the final alignment and construction method before detailed design and construction may proceed. Project costs may increase up to 100% based upon the alternative selected. Land costs included in WSSC Project W-202.00.

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission (anticipates receiving Mandatory Referral submissions from the WSSC as this project moves toward final completion of design) and Maryland State Department of Transportation.

NOTE This project supports 100% Growth.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff		
	Other		
Facility Costs	Maintenance	329	2007
	Debt Service		
Total Costs		329	12
Impact on Water or Sewer Rate			

F. Approval and Expenditure Data (000's)

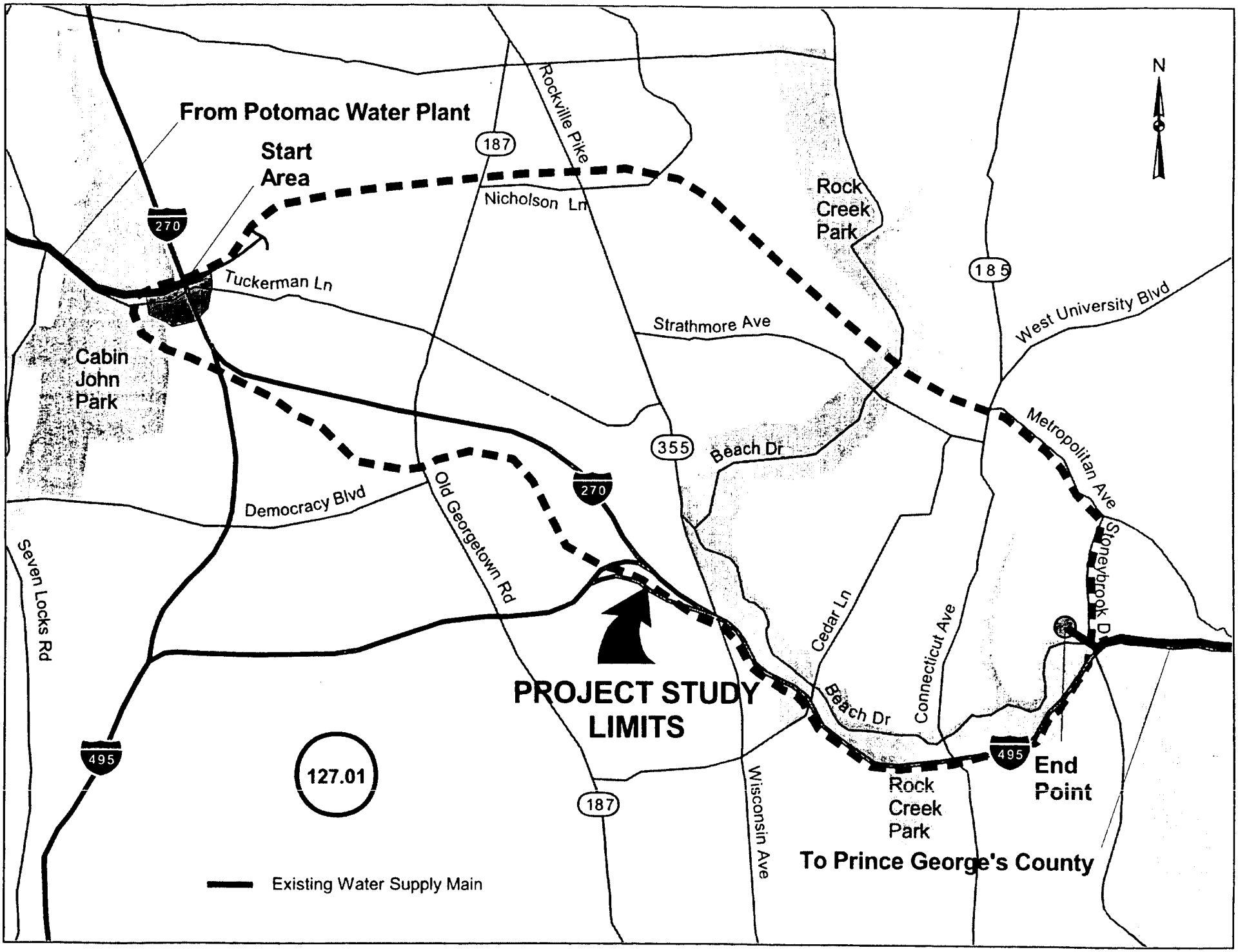
Date First in Capital Program	FY 93
Date First Approved	FY 93
Initial Cost Estimate	63,000
Cost Estimate Last FY	72,465
Present Cost Estimate	80,034
Approved Request, Last FY	1,980
Total Expenditures & Encumbrances	1,700
Approval Request FY 06	6,680
Supplemental Approval Request Current FY (05)	

G. Status Information

Land Status:	Site not determined
% Project Completion:	P-20%
Est. Completion Date:	FY 2011

H. Map **Map Reference Code:**

SEE ATTACHED MAP


From Potomac Water Plant
Start Area
Cabin John Park
Tuckerman Ln
Nicholson Ln
Rockville Pike
187
270
Rock Creek Park
185
West University Blvd
Strathmore Ave
Metropolitan Ave
355
Beach Dr
Democracy Blvd
Old Georgetown Rd
Seven Locks Rd
Stoneybrook Dr
Cedar Ln
Connecticut Ave
PROJECT STUDY LIMITS
Beach Dr
495
End Point
127.01
Wisconsin Ave
Rock Creek Park
To Prince George's County
Existing Water Supply Main
N

Resolution No. 15-1021

PART I: WASHINGTON SUBURBAN SANITARY COMMISSION CAPITAL PROJECTS TO BE CLOSED OUT

The Washington Suburban Sanitary Commission has authorized the close out of the following Montgomery County and Bi-County Projects.

COUNTY NUMBER	CATEGORY	PROJECTS
023809	Montgomery	Cabin Branch Tributary Sewer
023810	Montgomery	Cabin Branch Trunk Sewer
983851	Montgomery	Crystal Rock Wastewater Pumping Station, PT1
973832	Montgomery	Crystal Rock WWPS
983852	Montgomery	Crystal Rock WWPS Force Main, Part 2