

WESTERN WAKE PARTNERS

Policy Advisory Committee Recommendations

Tuesday, December 13, 2005

Cary Town Hall, Administration Conference Room #22010

316 N. Academy Street, Cary, North Carolina

www.westernwakepartners.org

Cary Mayor Ernie McAlister called the meeting to order at 4:00 p.m. Committee members attending were Apex Mayor Keith Weatherly, Holly Springs Mayor Dick Sears, Apex Town Manager Bruce Radford, Cary Town Manager Bill Coleman, and Morrisville Town Manager John Whitson were in attendance. Committee members absent were Morrisville Mayor Jan Faulkner and Holly Springs Town Manager Carl Dean. The meeting adjourned at 4:22 p.m.

1. Approval of minutes of the Policy Advisory Committee held on October 13, 2005.

Mayor Sears moved to approve the minutes, Morrisville Town Manager John Whitson provided the second and the committee unanimously approved the motion.

2. Items for Discussion

a. Proposed Increase in Holly Springs Capacity in the Effluent Pump Station and Pipeline (PAC06-05)

Mayor Sears stated just prior to his motion that Holly Springs was not necessarily looking for finalization today but that they had this issue under study. Mayor Sears moved to approve the development of an amendment to the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* to increase Holly Springs' capacity and share of the Effluent Pump Station and Pipeline. The motion was not seconded and no action was taken. (Attachment A)

b. Proposed Increase in Cary Nutrient Removal Capacity in the WRF (PAC06-06)

John Whitson moved to approve adding additional nutrient removal capability to the Town of Cary's share in the Western Wake Water Reclamation Facility, Mayor Weather provided the second, and the committee unanimously approved the motion. (Attachment B)

c. Electric Service Proposals (PAC06-07)

Kim Fisher, Project Manager for the Lead Agency, made a revised recommendation for the Policy Advisory Committee to approve a budget of up to \$90,000 to engage a consultant to assist with the selection of an electric service provider, for the Technical Advisory Committee to select the consultant, and for the Lead Agency to engage the selected consultant. The consultant will write a Request for Proposals for electric service to the Water Reclamation Facility and Effluent Pump Station site, review the proposals received, and make a recommendation to the Technical Advisory Committee. Mayor Weatherly moved to approve the recommendation, Mayor Sears provided the second, and the committee unanimously approved the motion. (Attachment C)

3. Other Business

Cary Mayor Ernie McAlister commented that Cary will be seeking federal assistance for this project and if other Partners are doing the same that it may carry a greater presence in Washington if all Partners seek federal funding together.

4. Next Meeting

Apex Mayor Keith Weatherly requested to change future meeting dates from the 2nd Tuesday of the month. Committee members agreed by consensus that future meetings would be held on the 4th Tues. at 4 p.m.

Next meeting: March 28, 2006, 4:00 p.m. at Cary Town Hall

WESTERN WAKE PARTNERS

Report to the Policy Advisory Committee (PAC06-05)

Date: December 13, 2005
To: Policy Advisory Committee
From: Kim Fisher, P.E. – Town of Cary, Director of Public Works and Utilities
Prepared By: Leila Goodwin, P.E. – Town of Cary, Water Resources Manager
Subject: Consideration of Increasing Holly Springs' Capacity and Share of Effluent Pump Station and Pipeline

Background:

Currently, the Effluent Pump Station and Pipeline is planned to be built to meet Phase 1 needs of the partners. Holly Springs is evaluating the possibility of increasing the capacity they build in Phase 1 (6 million gallons per day [mgd]) to meet their needs all the way through the year 2030 (8.28 mgd). It is expected that the total cost will increase; Holly Springs' cost and percentage share will increase; the other Partners' capacity will not change; and the other Partners' cost will remain the same or decrease.

The portion of the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* that would change would be Tables A-1, A-3, A-5 and A-7 in Exhibit A. Those tables, with current values, are attached, and the values that would change are shown shaded and bold.

Requested Action: It is requested that the Policy Advisory Committee approve development of an amendment to the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* to increase Holly Springs' capacity and share of the Effluent Pump Station and Pipeline. After development, the amendment would be submitted to the elected governing board of each Partner for approval.

Table A-1: Phase 1 Project Component Capacities and Costs

Facility	Capacity (mgd) ¹	Capital Costs (including 3.5% annual inflation)	Land costs, this agreement	Subtotal, this agreement	Land Costs, previous agreement	Total Costs
West Cary PS ⁴	30.7 ²	\$ 12,597,000		\$ 12,597,000	\$ 400,000	\$ 12,997,000
West Cary Force Main	30.7 ²	\$ 8,589,000	\$ 99,000	\$ 8,688,000		\$ 8,688,000
West Reedy Branch Gravity Sewer	54.7 ²	\$ 7,429,000	\$ -	\$ 7,429,000		\$ 7,429,000
Beaver Creek PS	40.4 ²	\$ 20,774,000		\$ 20,774,000	\$ 580,000	\$ 21,354,000
Beaver Creek Force Main	42.7 ²	\$ 9,642,000	\$ 124,000	\$ 9,766,000		\$ 9,766,000
Western Wake WRF	18.0 ³	\$ 113,698,000		\$ 113,698,000	\$7,585,000	\$ 121,283,000
Effluent Pump Station	24.0 ³	\$ 10,062,000		\$ 10,062,000	\$1,235,000	\$ 11,297,000
Effluent Pipeline and Outfall	24.0 ³	\$ 37,378,000	\$1,323,000	\$ 38,701,000		\$ 38,701,000
		\$ 220,169,000	\$1,546,000	\$ 221,715,000	\$9,800,000	\$ 231,515,000

¹ Based on 2020 flows, except for West Reedy Branch Gravity Sewer which is based on 2030 flows

² Peak hourly flow rate

³ Maximum month flow rate

⁴ Includes \$4,943,000 for a portion of the regional facilities being built early by Cary prior to 2011, plus \$7,654,000 for expanding those facilities to meet the Project Partners' needs in 2011.

Table A-3: Phase 1 Pro-rata Shares and Capacity, Western Wake Regional Wastewater Management Facilities

Facility	Apex	Cary	Holly Springs	Morrisville	Total
West Cary PS					
Pro-rata Share (%)	0%	87.8%	0%	12.2%	100%
Hydraulic Capacity (mgd, peak hourly)	0	27.0	0	3.7	30.7
West Cary Force Main					
Pro-rata Share (%)	0%	87.8%	0%	12.2%	100%
Hydraulic Capacity (mgd, peak hourly)	0	27.0	0	3.7	30.7
West Reedy Branch Gravity Sewer ¹					
Pro-rata Share (%)	10.6%	78.2%	0%	11.2%	100%
Hydraulic Capacity (mgd, peak hourly)	5.8	42.8	0	6.1	54.7
Beaver Creek PS					
Pro-rata Share (%)	22.0%	68.6%	0%	9.4%	100%
Hydraulic Capacity (mgd, peak hourly)	8.9	27.7	0	3.8	40.4
Beaver Creek Force Main					
Pro-rata Share (%)	26.2%	64.9%	0%	8.9%	100%
Hydraulic Capacity (mgd, peak hourly)	11.2	27.7	0	3.8	42.7
Western Wake WRF ²					
Pro-rata Share (%)	34.1%	57.7%	0%	8.2%	100%
Hydraulic Capacity (mgd, maximum month)	6.21	10.4	0	1.5	18.0
Effluent Pump Station					
Pro-rata Share (%)	25.6%	43.4%	24.8%	6.2%	100%
Hydraulic Capacity (mgd, maximum month)	6.1	10.4	6.0	1.5	24.0
Effluent Pipeline and Outfall					
Pro-rata Share (%)	25.6%	43.4%	24.8%	6.2%	100%
Hydraulic Capacity (mgd, maximum month)	6.1	10.4	6.0	1.5	24.0

¹ West Cary Gravity Sewer sizing and capacity allocations are based on 2030 flows

² Por-rata Shares for Western Wake WRF also apply to the pollutant loading capacity allocated to each partner.

Table A-5: Phase 1 Pro-rata Shares and Estimated Capital Costs ¹, Western Wake Regional Wastewater Management Facilities

Facility	Apex	Cary	Holly Springs	Morrisville	Total
West Cary PS ²					
Pro-rata Share (%)	0%	87.8%	0%	12.2%	100%
Capital Cost	0	\$11,060,000	0	\$1,537,000	\$12,597,000
West Cary Force Main					
Pro-rata Share (%)	0%	87.8%	0%	12.2%	100%
Capital Cost	0	\$7,541,000	0	\$1,048,000	\$8,589,000
West Reedy Branch Gravity Sewer					
Pro-rata Share (%)	10.6%	78.2%	0%	11.2%	100%
Capital Cost	\$787,000	\$5,810,000	0	\$832,000	\$7,429,000
Beaver Creek PS					
Pro-rata Share (%)	22.0%	68.6%	0%	9.4%	100%
Capital Cost	\$4,570,000	\$14,251,000	0	\$1,953,000	\$20,774,000
Beaver Creek Force Main					
Pro-rata Share (%)	26.2%	64.9%	0%	8.9%	100%
Capital Cost	\$2,526,000	\$6,258,000	0	\$858,000	\$9,642,000
Western Wake WRF					
Pro-rata Share (%)	34.1%	57.7%	0%	8.2%	100%
Capital Cost	\$38,771,000	\$65,604,000	0	\$9,323,000	\$113,698,000
Effluent Pump Station					
Pro-rata Share (%)	25.6%	43.4%	24.8%	6.2%	100%
Capital Cost	\$2,576,000	\$4,367,000	\$2,495,000	\$624,000	\$10,062,000
Effluent Pipeline and Outfall					
Pro-rata Share (%)	25.6%	43.4%	24.8%	6.2%	100%
Capital Cost	\$9,569,000	\$16,222,000	\$9,270,000	\$2,317,000	\$37,378,000
Total Capital Cost (excluding land)	\$58,799,000	\$131,113,000	\$11,765,000	\$18,492,000	\$220,169,000

¹ Not including land costs.

Table A-7: Phase 1 Total Costs, Western Wake Regional Wastewater Management Facilities

	Apex	Cary	Holly Springs	Morrisville	Total
Capital Costs, excluding Land	\$58,799,000	\$131,113,000	\$11,765,000	\$18,492,000	\$220,169,000
Land Costs, this Agreement	\$399,000	\$744,000	\$298,000	\$105,000	\$1,546,000
Adjustments to Land Costs in Land Costs and Preliminary Work Agreement	-\$139,000	\$121,000	\$0	\$18,000	\$0
Subtotal, this Agreement	\$59,059,000	\$131,978,000	\$12,063,000	\$18,615,000	\$221,715,000
Land Costs, previous Agreement	\$3,304,000	\$5,477,000	\$278,000	\$771,000	\$9,800,000
Total Estimated Cost	\$62,363,000	\$137,425,000	\$12,341,000	\$19,386,000	\$231,515,000

WESTERN WAKE PARTNERS

Report to the Policy Advisory Committee (PAC06-06)

Date: December 13, 2005
To: Policy Advisory Committee
From: Kim Fisher, P.E. – Town of Cary, Director of Public Works and Utilities
Prepared By: Leila Goodwin, P.E. – Town of Cary, Water Resources Manager
Subject: Consideration of Adding Additional Nutrient Removal Capability to the Town of Cary's Share in the Western Wake Water Reclamation Facility

Background:

Preliminary engineering for the Western Wake Regional Water Reclamation Facility (WRF) is based on assuming that the quality of the raw wastewater is similar in characteristics to wastewater currently being generated by each partner (Apex, Cary and Morrisville). In addition, it has been assumed that Cary's current Research Triangle Park customers with Industrial User Permits would implement pretreatment to reduce the nutrient (i.e. nitrogen and phosphorus) content of their wastewater.

Cary provides service to customers in the Wake County portion of Research Triangle Park (RTP South) per a contract between Cary, Wake County, and Research Triangle Foundation (RTF). The County has asked Cary to evaluate the feasibility and cost of changing the design basis for the WRF to allow for higher nutrient loads from RTP South. Cary would also like to evaluate the cost of providing additional nutrient removal capability.

Cary has asked the WRF design consultant to provide a cost estimate for evaluating additional WRF influent loading scenarios, and will pay for the evaluation separately per Section 2.4 of the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* specifically anticipated this scenario:

"Section 2.4. Special Assessments. The allocations of the Capital Costs of the Wastewater Management Facilities pursuant to Section 2.2, and the allocations of Current Expenses pursuant to Section 2.3, are intended to facilitate a sharing of the costs of construction and operation of the Wastewater Management Facilities based upon (i) the entitlement to use and use of the facilities by the respective Project Partners and (ii) the assumption that the unit-costs of providing and delivering the services of the Wastewater Management Facilities will be the same for all the Project Partners. The parties acknowledge that under certain circumstances the cost of such services to collect, convey and treat wastewater with certain characteristics will be more expensive than for other types of wastewater and that the additional costs should be borne by the party that generates the wastewater that is more expensive to treat and convey.

In the event that any special or additional apparatus, equipment or component is required to be included in any component of the Wastewater Management Facilities, or if any additional Current Expenses are incurred by the Wastewater Management Facilities, on account of the characteristics of the wastewater or treated effluent of one specific Project Partner (such as additional systems to treat wastewater resulting from heavy industrial use or wastewater contaminated by infiltration and inflow or additional facilities or expenses to

convey treated effluent on account of the volume from one Partner), then the Lead Agency shall levy a special assessment upon the Project Partner (including the Lead Agency, if applicable) responsible for the delivery of the wastewater or treated effluent requiring the special facilities or additional Current Expenses so that only that party is responsible for the additional Capital Costs or Current Expenses.”

In the event that Cary, whether on its own or on behalf of Wake County, elects to modify the design of the WRF to allow for higher nutrient loading, then an amendment to the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* would be needed to modify the allocation of nutrient loading for each partner. This would consist of changing the statement in Exhibit A, Section 2.0:

“Table A-3 presents the partners’ pro-rata cost shares and resulting hydraulic capacity in each facility. For the WRF, these pro-rata shares also represent each partners’ share of pollutant loading capacity.”

A new table would be added to the Agreement presenting each partners’ share of pollutant loading capacity, while Table A-3 would then represent only the hydraulic loading capacity. Additional costs would be documented in the amendment and borne solely by the Town of Cary.

This item is presented to the Policy Advisory Committee in the interests of time, since any changes in the design criteria for the WRF will need to be communicated to the design team as soon as possible. Any amendment to the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* will need to be approved by the elected officials of each partner.

Requested Action: It is requested that the Policy Advisory Committee approve development of an amendment to the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* to increase Cary’s nutrient removal allocation in the Western Wake Regional Water Reclamation Facility. After development, the amendment would be submitted to the elected officials of each Partner for approval.

WESTERN WAKE PARTNERS

Report to the Policy Advisory Committee (PAC06-07)

Date: December 13, 2005
To: Policy Advisory Committee
From: Kim Fisher, P.E. – Town of Cary, Director of Public Works and Utilities
Prepared By: Leila Goodwin, P.E. – Town of Cary, Water Resources Manager
Subject: Consideration of Consulting Services for Soliciting and Evaluating Proposals from Electrical Power Providers for WRF Site

Background:

At the October 13, 2005 meeting, the Policy Advisory Committee approved the solicitation of proposals by the Lead Agency from the Town of Apex and from Progress Energy regarding the provision of electrical power to the WRF site.

The Lead Agency recommends to the WRF Project Partners that we retain consulting assistance to aid in the solicitation and evaluation of the proposals. We have asked Poyner and Spruill to submit a scope and fee estimate for preparing the request for proposals. They have also suggested several firms they would recommend requesting proposals from to aid in evaluating the proposals.

We recommend that the Technical Advisory Committee review and approve the proposal from Poyner and Spruill; review proposals from firms for evaluation of the proposals; and recommend the selection of a firm to review the electrical power provider proposals.

Based on the evaluation of proposals by the outside firm and by the Technical Advisory Committee, the Lead Agency will bring a recommendation for selection of an electrical power provider to the Policy Advisory Committee.

Requested Action: It is requested that the Policy Advisory Committee approve the Lead Agency retaining Poyner and Spruill, for a fee to be approved by the Technical Advisory Committee, to write the request for proposals for electrical power service to the WRF site. It is also requested that the Policy Advisory Committee approve the Lead Agency to solicit proposals for firms to evaluate the electrical service provider proposals, and to retain the firm recommended by the Technical Advisory Committee.