Board of Supervisors of Northampton County
P.O. Box 66 • Eastville, Virginia 23347

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PHONE: 757-678-0440
FAX: 757-678-0483

November 12, 2013

Mr. Eyre Baldwin
16464 Courthouse Road
Eastville, Va 23347

Dear Eyre:

Thank you for your e-mail dated November 7, 2013 seeking certain information related to the project known as the Southern Node Commercial Wastewater Project.

The PSA has taken great steps to insure all information is available publicly; therefore, I am directing you to the County's website (www.co.northampton.va.us). From the homepage, you can access the link to the Wastewater Project. On that page, you will find the Southern Node Preliminary Engineering Report, which has served as the basis for obtaining all of the construction estimates. This document has allowed us to prepare estimates of project costs as the Board has considered variations of size and scope of the project. In addition, under the "PSA" section of the Wastewater Project page, you will see a section to click on entitled, "more information". Under this page, you will find the powerpoint presentations delivered to the Board in January 2012 and January 2013 as well as the public information session presentation dated September 16, 2013 which included the estimated project costs. Also, there are correspondence received by the PSA with responses as provided which include useful information listed as "Questions & Answers" from Messrs. Morris and Bender.

I am enclosing additional information presented to the PSA in 2012 and again in 2013 that provided a basis for developing cost estimates used in this project that was pulled from the Southern Node Preliminary Engineering Report.

It is important to understand that the $1 million estimate provided to the Board relates to extending wastewater service to the Webster site from the planned Southern Node Commercial Wastewater Service District. This would entail a pump station at the site and a force main of about 1.5 miles. Certainly, wastewater service could be provided at your property by means of

an independent system. However, the PSA is seeking to implement systems that would foster the advantages of regionalization.

Lastly, you inquired about funds expended to date. The County was the recipient of several planning grants totaling $80,000, that covered the costs of the Southern and Northern Node Preliminary Engineering Reports and associated public outreach as required under those planning grants. As part of the FY 2014 budget, a new fund has been created: Fund 250 – Wastewater Project. It contains $95,000 for engineering services and $35,000 as the County's contribution for debt service for the Southern Node Commercial Wastewater Project, if the project comes to fruition. The contract and subsequent amendment w/ Hurt & Proffitt is also available on the County's website.

If you have any further questions, please advise.

Sincerely yours,

Katherine H Nunez

KATHERINE H. NUNEZ
County Administrator

Cc: Bob Panek, PSA Chairman

Enclosures

January 15, 2013

Webster Add-On
To Phase 1 – "Commercial"

It is approximately 1.53 miles from the Bayside Road terminus of the planned force main to the CC WWTP. We would need a pump station and force main extension:

Pump Station	$300,000
Force Main, 8,100 feet@$50/ft	405,000
Subtotal	$705,000
Mobilization 3%	21,150
Permits, Bonds, Fees 5%	35,250
Miscellaneous 5%	35,250
Subtotal	$796,650
Contingency 10%	79,665
Subtotal	$876,315
Engineering 9.8%	85,879
Construction Admin. 1%	8,763
Construction Inspection 2%	17,526
Total	$988,483

January 15, 2013

Cheriton Add-On
To Phase 1 - "Commercial"

The estimate for **Southern Node – "Cheriton Only" is $7.5M**. This includes a vacuum collection system for the Town of Cheriton, **a vacuum pump station and a force main to the Cape Charles WWTP (approx. 3.2 miles in length)**.

The estimate for Phase 1 – "Commercial" is $1.5M-$2.0M. This includes a collection system with grinder pumps and **a low pressure force main to the CC WWTP (approx. 2.25 miles in length). It does not include a vacuum pump station**.

If Phase 1 is built, about 70% of the force main to the CC WWTP would exist. **Expansion of service to Cheriton would require the collection system, pump station and extending the force main**.

The **Phase 1 estimate for the force main** follows:

11,800 feet@$50/ft	$590,000
Mobilization 3%	17,700
Permits, Bonds, Fees 5%	29,500
Miscellaneous 5%	29,500
Sub-total	$666,700
Contingency	66,670
Sub-total	$733,370
Engineering 9.8%	71,870
Construction Admin. 1%	7,334
Construction Inspection 2%	14,667
Total	$827,241

Thus, **adding on service to Cheriton would cost** $7.5M less $0.8M, or **$6.7M**.

Northampton County
Opinion of Probable Costs for Selected Alternatives: Alternative 1 - Cape Charles

Description	Quantity	Unit	Unit Price	Probable Cost
10" Vacuum Main	620	LF	$40	$24,800
8" Vacuum Main	2,367	LF	$35	$82,845
6" Vacuum Main	6,137	LF	$30	$184,110
4" Vacuum Main	15,385	LF	$26	$400,010
3" Service Lateral	141	EA	$1,000	$141,000
10" Isolation Valve	1	EA	$1,500	$1,500
8" Isolation Valve	2	EA	$1,250	$2,500
6" Isolation Valve	9	EA	$1,000	$9,000
4" Isolation Valve	12	EA	$800	$9,600
AIRVAC Valve Pit Package	141	EA	$4,100	$578,100
Special Tools	1	Set	$5,300	$5,300
Spare Parts	1	Set	$5,960	$5,960
Trailer Mounted Vacuum Pump	1	EA	$32,000	$32,000
Installed Vacuum Station	1	EA	$788,900	$788,900
Force Main to Cape Charles WWTP	16,800	EA	$55	$924,000
Road Bores	700	LF	$250	$175,000
Railroad Bores	450	LF	$300	$135,000
Pavement Repairs	15,800	LF	$35	$553,000
Vac Station Site Preparation	1	LS	$50,000	$50,000
Maintenance of Traffic	1	LF	$30,000	$30,000
House Connection (Same Side)	122	LS	$1,500	$183,000
House Connection (Opp. Side)	122	LS	$3,000	$366,000
Business Connection (Same Side)	17	LS	$2,500	$42,500
Business Connection (Opp. Side)	17	LS	$5,000	$85,000
Field Service Technician (Airvac) - full-time	1	LS	$80,000	$80,000
E-one grinder pump & house conn.	30	LS	$7,300	$219,000
Pressure connection & tie in	1	LS	$30,000	$30,000
Flow Metering	1	LS	$50,000	$50,000
Mobilization	1	LS	3.00%	$155,644
Permits, Bonds, Fees	1	LS	5.00%	$259,406
Total				$5,603,175

Contingency	10.00%	$560,318
Interim financing	LS	$42,000
Start-up	LS	$10,000
Meetings	LS	$25,000
O&M Manual	LS	$40,000
Railroad Permits	LS	$80,000
Legal	LS	$25,000
Property/Easement Acquisition	LS	$100,000
Engineering	9.20%	$515,492
Construction Administration	1.00%	$56,032
Construction Inspection	1.75%	$98,056
Total Probable Construction Cost: Selected Alternative Cape Charles		$7,155,072

Southern Node, Commercial Only, December 9, 2011

	Quantity	Units	$/Unit	Total
10" FM to CC WWTP	11800	LF	$ 50	$ 590,000
6" Vac. Main, US 13	8170	LF	$ 30	$ 245,100
4" Vac. Main to FMHP	4530	LF	$ 26	$ 117,780
Grinder Package	21	EA	$ 8,000	$ 168,000
Service lateral (residence)	20	EA	$ 1,200	$ 24,000
Service lateral (business)	11	EA	$ 3,200	$ 35,200
Residence connect to main	10	EA	$ 2,350	$ 23,500
Business connect to main	11	EA	$ 3,750	$ 41,250
Vacuum/Pump Station	1	EA	N/A	N/A
Sub Total				$ 1,244,830
Mobilization 3%				$ 37,345
Permits/Bonds/Fees 5%				$ 62,242
Miscellaneous 5%				$ 62,242
Sub Total				*$ 1,406,658*
Const. Contingency 10%				$ 140,666
Sub Total				*$ 1,547,324*
Engineering 9.8%				$ 151,638
Const. Administration 1%				$ 15,473
Const. Inspection 2.5%				$ 38,683
Sub Total				*$ 1,753,118*
Property Acquisition				$ 100,000
Total				**$ 1,853,118**

Notes

1. Vacuum/pump station is 50% of original estimate.
This would be intended to serve commercial properties along US 13 and Fairview Mobile Home Park.
2. Force Main to CC WWTP = 12,400' @ $50.
3. Vacuum Main on US 13 = 6,200' @ $30.
4. Vacuum Main to FMHP = 7,100' @ $26.

Vacuum collection not feasible. Use low pressure for

Southern Node, Commercial Only, December 9, 201 i

10" FM to CC WWTP	620,000
6" Vac. Main, US 13	186,000
4" Vac. Main to FMHP	184,600
Vacuum/Pump Station	420,000
Sub Total	1,410,600
Mobilization 3%	42,318
Permits/Bonds/Fees 5%	70,530
Miscellaneous 5%	70,530
Sub Total	1,593,978
Const. Contingency 10%	159,398
Sub Total	1,753,376
Engineering 6.7%	117,476
Const. Administration 1%	17,534
Const. Inspection 2.5%	43,834
Sub Total	1,932,220
Property Acquisition	100,000
Total	2,032,220

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