

KC 114-06 Chestertown WWTP
Site Plan 06-09

MSA. S. 1829-5831

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor



Martin G. Madden
Chairman

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401

(410) 260-3460 Fax: (410) 974-5338

www.dnr.state.md.us/criticalarea/

February 28, 2006

Ms. Amy Moredock
Kent County Department of Planning and Zoning
Kent County Government Center
400 High Street
Chestertown, Maryland 21620

VIA FACIMILE

Re: Town of Chestertown WWTP – 06-09

Dear Ms. Moredock:

Pursuant to your request I have reviewed the information submitted to me regarding the above referenced project. It is understood that the Town of Chestertown intends to upgrade the current wastewater treatment plant. The goal of the upgrade is to further enhance the ability of the treatment facility to meet MDE requirements for Enhanced Nutrient Removal (ENR). The treatment facility upgrades will also provide for a more efficient and reliable facility to serve the Town.

The subject site is located within the Critical Area within the Resource Conservation Area (RCA) also referred to as the Resource Conservation District (RCD) under the Kent County Land Use Ordinance.

Article V Section 2 2.3 of the Kent County Ordinance provides for the permission of "public utilities and structures" within the RCA provided the disturbance conforms to the standards and limitations of Article VII (Special Exceptions) under the Ordinance.

The proposed scope of construction within the RCA/RCD consists of the addition of an enhanced nutrient removal monitoring and control system building and denitrification filters. The proposed structures and associated impervious surface will be adjacent to existing facilities used for the plant. Based on the information provided by the County, the existing impervious surface within the RCA/RCD is 37,850 square feet. The proposed improvements will increase the impervious surface by 3,212 square feet.

TTY for the Deaf

Annapolis: (410) 974-2609 D.C. Metro: (301) 586-0450

From the site plans provided it appears that an existing road intrudes into the 100 foot buffer. If improvements are being considered for this access road then consideration should be made to relocate the road outside the Buffer. All new improvements shown on the site plan are located outside the 100 foot Buffer. It is recommended that all BMP's are used to protect the Buffer from any disturbance during construction of the upgrade and operation of the facility.

If the Kent County Planning Commission determines the Town has sufficiently addressed all planning issues as included in the Ordinance then this office does not oppose the special exception. If approval is granted for the special exception by the Kent County Planning Commission, then under COMAR 27.02.02 the County should submit a copy of a Consistency Report for Critical Area Commission file.

Thank you for the opportunity to comment. Please include this letter in your file and submit it as part of the record for special exception. Please notify this office of the decision made in this case.

Best regards,



Chris Clark
Natural Resources Planner

cc: KC 114-06

Clark, Chris

From: Amy Moredock [amoredock@kentgov.org]
Sent: Monday, February 27, 2006 3:38 PM
To: Clark, Chris
Subject: FW: town of chestertown

Hello Chris.

I have attached a site plan submitted by the engineers Buchart-Horn (the fax I sent probably wasn't very clear). Within the RCD section of the parcel, the Town proposes an enhanced nutrient removal monitoring and control system building (165 square feet) and denitrification filters.

Best,
Amy

Answers to your questions in green below.

1. Is any portion of the plant currently under construction? Some correspondence I have dating back about 1 year indicates that there has been some activity on the site.
Not of which I am aware.

1. Do you have any square footage numbers on the limits of disturbance/final impervious figures for the proposed activity in the Critical Area?

(See attached site plan for more specifics)

Existing impervious surfaces in RCD: 37,850 square feet

Proposed impervious surfaces in RCD: 3,212 square feet

Total impervious surfaces in RCD: 41,062 square feet

1. Is there a more detailed site plan that I could see regarding the work in the Critical Area?

I have a detail sheet which probably will not fax very clearly, but I sent it to your attention. I do not have it in PDF format.

Any help with those issues would be appreciated. I am trying to get the comments back to as soon as possible but need this information to complete the review.

Best regards. Chris

Chris Clark
Natural Resources Planner
Critical Areas Commission
1804 West St., Suite 100
Annapolis, MD 21401
410-260-3460
direct - 410-260-3476
fax - 410-974-5338

**TOWN OF CHESTERTOWN, KENT COUNTY, MD
CHESTERTOWN UTILITIES COMMISSION
CHESTERTOWN WWTP BNR/ENR IMPROVEMENTS
PROJECT NARRATIVE
JUNE 2005**

PROJECT SCOPE

The proposed project involves the construction of improvements to the existing Town of Chestertown's Wastewater Treatment Plant for the purposes of removing nutrients.

The Maryland Department of the Environment has identified the nutrient removal goals for the plant effluent as 3.0 mg/l total nitrogen and 0.3 mg/l phosphorus. These goals are referred to as enhanced nutrient removal (ENR). The existing plant cannot meet these goals and must be upgraded and improved. This project will provide the BNR/ENR required for supporting the clean-up of the Chesapeake Bay. It will also provide a more efficient and reliable treatment system for the Town.

The proposed plant upgrade and improvements are as follows:

Existing Force Main: The existing force main will remain and a connection will be made for an extension to divert the raw sewage from the existing lagoon treatment facilities to the new treatment (BNR/ENR) processes.

Flow Control Structure: A new structure will provide control of flow to the new (BNR/ENR) processes and to direct flow to the existing lagoons during extreme high flow conditions resulting from extreme wet weather. The flow can also be directed to the lagoons if an emergency bypass is required of the proposed (BNR/ENR) processes for shellfish protection.

Screening and Grit Removal: A new facility will be constructed to remove screenings and grit from the raw sewage.

Biological Nutrient Removal (BNR) System: Two wave oxidation type basins and two circular clarifiers will provide total nitrogen removal to 6-8 mg/l. Chemical addition using ferric chloride will reduce the phosphorus concentration to 1 mg/l.

De-nitrification Filters(ENR): Up-flow continuous cleaned filtering units will support the microorganisms required to further remove nitrogen to 3 mg/l. A trim feed system for ferric chloride will be used to further remove phosphorus through the filters to an effluent concentration of 0.3 mg/l.

Effluent Disinfection: For safety reasons, the existing gas chlorine and sulphur dioxide systems for chlorination and de-chlorination will be replaced with liquid sodium hypochlorite and sodium bisulfate.

Sludge Treatment: Waste sludge from the (BNR/ENR) processes will be pumped to existing Lagoon No. 1 which will act as a large sludge digester. No other sludge handling, dewatering or disposal equipment and processes are required.

The estimated total project cost is \$5,380,600. The project is anticipated to receive \$2,866,000 in BNR/ENR grant participation from the State of Maryland. This EPA grant is anticipated to provide \$482,100. The balance of the project cost will be the local share.

PLANNING OFFICE

Hoerger, Lisa

From: Hoerger, Lisa
Sent: Monday, May 23, 2005 3:39 PM
To: 'Town of Chestertown'
Subject: RE: Valley LLC or Kestell site in Chestertown (216 N. Mill) and BNR Improvements

Bill,

Thanks for the update. I will be in touch with Amy on the BNR improvements project. I'm glad you found the letter for the Kestell site. If you need anything else let me know. I hope your meeting went well last Wednesday.

Lisa

-----Original Message-----

From: Town of Chestertown [mailto:office@chestertown.com]
Sent: Monday, May 23, 2005 3:12 PM
To: Hoerger, Lisa
Subject: Re: Valley LLC or Kestell site in Chestertown (216 N. Mill) and BNR Improvements

Lisa:

P. S. We are still quite a way away from construction, so there is time no matter what we have to go through.

Bill

----- Original Message -----

From: Hoerger, Lisa
To: Town of Chestertown
Sent: Monday, May 23, 2005 2:42 PM
Subject: RE: Valley LLC or Kestell site in Chestertown (216 N. Mill) and BNR Improvements

Bill,

I carbon copied you on a letter dated February 14, 2005. I addressed it to Mr. Henry Gruber of the Board of Appeals. I faxed it over to the Town offices on 2/15/05. If you did not receive it, please let me know and I will be happy to fax it to you. That is the only correspondence from this office on that subject, aside from several telephone conversations.

On another note, I have not heard back from Charles Strehl of Buchart Horn, Inc. regarding the Chestertown Utilities Commission BNR improvements. Can you give me an update on this project? It may require Commission approval and that should be granted prior to commencement of construction.

Thanks!

-----Original Message-----

From: Town of Chestertown [mailto:office@chestertown.com]
Sent: Friday, May 20, 2005 1:57 PM
To: Hoerger, Lisa
Subject: Valley LLC or Kestell site in Chestertown (216 N. Mill)

Dear Lisa,

I am looking for copies of any correspondence that you may have sent to Mr. and Mrs. Girone, Peter Newlin or Chesapeake Associated Architects concerning the above reference project. I have your fax of Feb. 3, that Marian asked you to fax but nothing more. Did you send them any letters that I didn't get. If so, could you fax me a copy at 410-778-4378. Thank you so much.

5/25/2005

Hoerger, Lisa

From: Hoerger, Lisa
Sent: Tuesday, March 01, 2005 4:35 PM
To: 'Town of Chestertown'
Subject: RE: Chestertown Wastewater Treatment Plant



Consistency Report
for Local G...

Bill,

I just spoke with Charles Strehl from Buchart and Horn. I am faxing him the consistency form that I have attached below for you and spoke to him about completing the 10% pollutant reduction calculations since the site is in the Town's IDA. He will be getting that information, including Worksheet A, off of our website.

Since this project is on town-owned lands, it must be submitted to the Commission staff for review. If it can be demonstrated that this project meets the Town's Critical Area requirements, then you can submit a consistency report (attached) to me for review. If for some reason this project does not meet the town's Critical Area program, or it is considered to be "major development" as defined in COMAR 27.02.04 then it may require formal Commission approval (let's not cross that bridge yet).

I will be at our monthly Commission meeting all day tomorrow, but should be around Thursday if you have questions.

Thanks Bill!

Sincerely,

Lisa A. Hoerger
Natural Resources Planner
Critical Area Commission
1804 West Street, Suite 100
Annapolis, Maryland 21401

EMAIL: lhoerger@dnr.state.md.us
TELEPHONE: (410) 260-3478
FAX: (410) 974-5338

-----Original Message-----

From: Town of Chestertown [mailto:office@chestertown.com]
Sent: Thursday, February 24, 2005 9:50 AM
To: Hoerger, Lisa
Cc: Lutter, Larry
Subject: Re: Chestertown Wastewater Treatment Plant

Lisa:

The engineers for the WWTP are Buchart & Horn. They are excellent and have done all the County things required (such as stormwater, sediment control, etc.). This is in spite of the fact that the County always thinks of the lagoons as being in Town and not the County. I am sending a copy of this email to Larry Lutter of Buchart & Horn for his information.

I will review the files on the Water upgrade to see if the Critical Areas review was conducted. It could have been done years ago since this project has been on the books since about 1997.

Bill

----- Original Message -----

From: "Hoerger, Lisa" <LHOERGER@dnr.state.md.us>

To: "Town of Chestertown" <office@chestertown.com>
Sent: Thursday, February 24, 2005 8:43 AM
Subject: RE: Chestertown Wastewater Treatment Plant

Bill,

I am fairly sure it was the WWTP BNR upgrade. In either case, we will need to see both projects if they are both in the Critical Area. Did you have to submit anything to the County for the Water Treatment Plant?

Thanks!

Lisa

-----Original Message-----

From: Town of Chestertown [mailto:office@chestertown.com]
Sent: Wednesday, February 23, 2005 5:11 PM
To: Hoerger, Lisa
Subject: Re: Chestertown Wastewater Treatment Plant

Lisa:

Thank you for your email. Do you mean the Water Treatment or Waste Water Treatment? Waste Water Treatment is still in the late planning stages and is actually in the County on Radcliffe Creek. The Water Treatment Plant has started construction but is very small in scope compared to the WWTP BNR and ENR upgrade. It is near Philosopher's Terrace and Kent Street.

Bill

----- Original Message -----

From: "Hoerger, Lisa" <LHOERGER@dnr.state.md.us>
To: <office@chestertown.com>
Sent: Wednesday, February 23, 2005 4:48 PM
Subject: Chestertown Wastewater Treatment Plant

Bill,

I read an article the other day about the upgrades to the plant. Since the plant is in the Critical Area, we will need to see a project application for it. It looks like it is in the Intensely Developed Area (IDA). If the upgrades meet the Town's Critical Area program requirements, a determination can be made that it is consistent with the local program and simply write a consistency report/letter. I can provide you with more information on that since you may not have had this type of project before. I will need to know whether any new buildings or impervious areas are proposed in conjunction with the upgrades.

I understand from the article (and appreciate this information is not always completely accurate!), that the work began last month, so the sooner we can review this project the better. Any time a local government project is proposed in the Critical Area, the town is required to send it to us for review. In those cases where projects may be considered to be of major significance, the Commission may need to approve it. Please let me know how I can assist you.

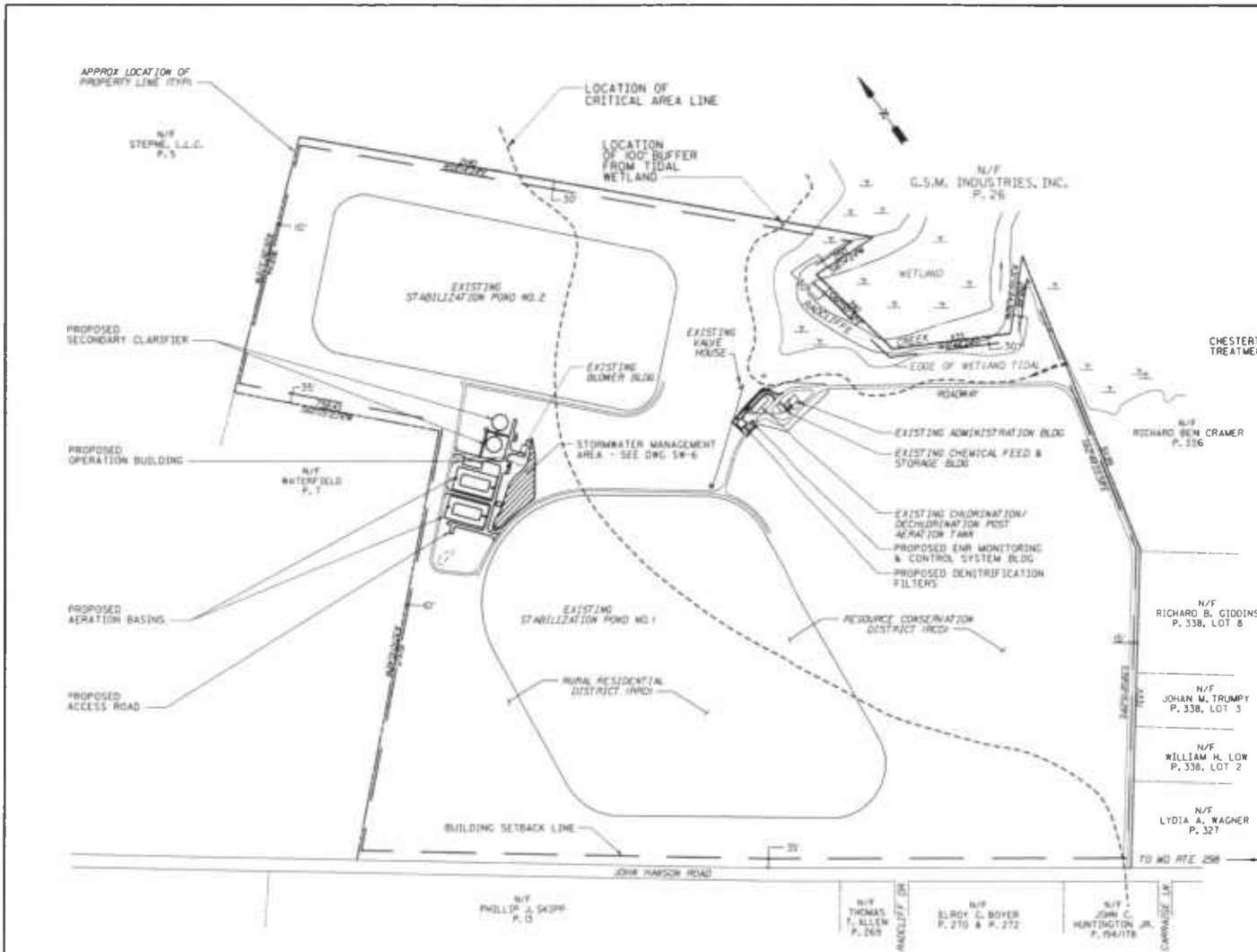
Sincerely,

Lisa A. Hoerger
Natural Resources Planner
Critical Area Commission
1804 West Street, Suite 100
Annapolis, Maryland 21401

EMAIL: lhoerger@dnr.state.md.us
TELEPHONE: (410) 260-3478

FAX:

(410) 974-5338



VICINITY MAP

SITE INFORMATION

PARCEL SIZE:	145.11 ACRES
RCD AREA	70.55 ACRES
RRO AREA	74.56 ACRES
TOTAL SITE IMPERVIOUS AREA:	EXISTING 38,650SF PROPOSED 54,259SF

IMPERVIOUS AREA IN RCD'S*

	EXISTING (SF)	PROPOSED (SF)	TOTAL (SF)
PAVING	35,197	2,760	37,957
STOEWALK	1,004	116	1,120
BUILDINGS	1,572	300	1,872
STANDBY GENERATOR	77	36	113
	37,850	3,212	41,062

*EXCLUDES OPEN TREATMENT TANKS

REVIEWED BY/FOR
KENT CO. DEPT OF PLANNING AND ZONING
APPROVAL

REVIEWED BY/FOR
KENT CO. PLANNING COMMISSION APPROVAL

REVIEWED BY/FOR
KENT CO. HEALTH DEPARTMENT APPROVAL



REVISIONS	
NO.	DESCRIPTION



TOWN OF CHESTERTOWN
WASTEWATER TREATMENT PLANT BNR IMPROVEMENTS

OVERALL SITE PLAN

DRAWING NO.
S-1
SHEET NO.
1 OF 1
PROJECT NO.
75696-00

CONTRACT NO. 2004-1
KENT COUNTY MARYLAND

FILE NO. 17/06
 DATE 1/06
 DRAWN BY MAS
 CHECK BY LAL
 DATE 1/06