PA 152-06 North Princess Anne Utility
Site Plan Upgrades

MSA.S. 1829-5897

PA152-06

Robert L. Ehrlich, Jr. Governor

Michael S. Steele
Lt. Governor



Martin G. Madden

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/

March 6, 2006

Mr. Robert Street
Somerset County Sanitary District, Inc.
11916 Somerset Avenue, Room 212
P.O. Box 236
Princess Anne, Maryland 21853

Re: North Princess Anne Utility Upgrades

Dear Mr. Street:

The purpose of this letter is to officially notify you of the Critical Area Commission's action on the above referenced project. On March 1, 2006, the Critical Area Commission unanimously approved the Town's proposal and site plan to upgrade the existing sewer and water main, as well as existing pumping stations within the Town's limits. This approval included the following conditions:

- 1. The Somerset County Sanitary District Commission shall provide mitigation for 1,700 square feet of disturbance within the Town of Princess Anne's Critical Area BEA and 100-foot Buffer and shall report back to the Critical Area Commission's Project Subcommittee no later than May 3, 2006 regarding progress made on locating a planting site and implementing the mitigation plan.
- 2. The Somerset County Sanitary District Commission shall install a turbidity curtain at the terminal end of the replacement sewer line, along the banks of the unnamed tributary at Front Street. This curtain shall be placed parallel to the shoreline during the entire project in order to avoid excessive siltation to the Sensitive Joint Vetch downstream.

In fulfillment of the above conditions, please provide Commission staff with a mitigation planting plan once completed. Once this information is received and reviewed by Commission staff, the planting plan will be placed on the following month's Commission agenda for evaluation and approval by the project subcommittee. Please note that should any changes to the site plan be proposed for the construction of the project, additional review and approval by the

Robert Street March 6, 2006 Page 2

full Commission would be required. Should you have any questions, please feel free to contact me at 410-260-3482.

Sincerely,

Kerrie L. Gallo

Natural Resource Planner

Cc: Tracey Gordy, MDP Scott Smith, DNR

Jay Parker, Town of Princess Anne

Josh Taylor, DBF

### Critical Area Commission

### STAFF REPORT March 1, 2006

APPLICANT:

Somerset County Sanitary District

**PROPOSAL:** 

North Princess Anne Utilities Upgrades

JURISDICTION:

Town of Princess Anne

**COMMISSION ACTION:** 

Vote

STAFF RECOMMENDATION:

Conditional Approval with condition

**STAFF:** 

Kerrie Gallo, Tracey Gordy

APPLICABLE LAW/

**REGULATIONS:** 

COMAR 27.02.06 Conditional Approval of State or

Local Agency Programs in the Critical Area

### **DISCUSSION:**

The Somerset County Sanitary District is proposing various utility upgrades in Princess Anne, including the installation of approximately 10,800 feet of new force main, 2,600 feet of new water main, and the replacement of 480 feet of gravity sewer. All of the work will be completed in State Highway Administration and County Rights-of-Way or within easements that have been obtained by the Somerset County Sanitary District. The objective of the proposed sewer upgrades is to relieve capacity issues with the existing gravity sewer system and pump stations. The upgrade would also increase the capacity of the system to accommodate recent and future anticipated growth within Princess Anne. Since some of the proposed activities will occur within the 100-foot Buffer to the Chesapeake Bay, this project requires a Conditional Approval by the Commission, as found in Subtitle 2, Chapter 6 of the Critical Area Commission's regulations for State and local government development.

The sewage pump station on Hickory Lane will be upgraded to increase its capacity. From this pump station a force main will be installed which will run directly to the Princess Anne Wastewater Treatment Plant (WWTP). The force main will be installed by trenchless methods beneath all MD-SHA maintained roads. Where the force main reaches the tidal wetland Buffer near the Manokin River, the force main will be directional bored approximately 1,600 feet, under the Manokin River and its 100-foot Critical Area Buffer to minimize disturbances to the wetland and the Buffer. The force main will then run to the WWTP and discharge into the existing wet well.

In addition, the Deal Island Road pump station will also be upgraded. The existing 6 inch force main from the pump station will be connected to the new force main to allow for discharge to the WWTP.

The water main being proposed will tap into the existing main on Somerset Avenue and connect to an existing main on Carol Lane to improve water system pressure and fire protection. The water main will also be installed by trenchless methods beneath all MD-SHA maintained roads. All water main work is outside of the Critical Area.

Along with the addition of force mains and a water main, the existing gravity sewer and manholes from the intersection of Somerset Avenue and Front Street to Manhole 44 will be upgraded and installed at a constant slope to allow for additional capacity to the Broad Street pump station.

The project will disturb the Critical Area Buffer at two sites. The first site will be the gravity sewer replacement along Front Street (See Attachment #1). The sewer is located within an Intensely Developed Area (IDA) and Buffer Exemption Area (BEA). The gravity sewer replacement will cause approximately 1,230 square feet of temporary disturbance to the IDA (outside of the 100' Buffer) and approximately 1,200 square feet of temporary disturbance within the BEA. Total temporary disturbance within the Critical Area at this site would be 2,430 square feet.

The second site affected is along U.S. Route 13 (See Attachment #2). The proposed force main will be installed by using an open cut within the Critical Area to a point outside of the Buffer. The force main will then be directionally bored beneath the Manokin River and associated wetlands. This area is a Limited Development Area (LDA) and will be affected due to the addition of a new wet well and generator at the Deal Island Road pump station, requiring about 400 square feet of disturbance within the Buffer (250 square feet of temporary disturbance and 150 square feet of permanent disturbance for concrete pads). The existing force main from the Deal Island Road Pump Station will be tied into the proposed force main, along Route 13, requiring approximately 100 square feet of additional temporary disturbance within the Buffer. Total temporary disturbance within the Critical Area for this site, outside of the Buffer, is 13,000 square feet, for a total of 13,500 square feet of disturbance within the Critical Area.

This development proposal will result in approximately 1,700 square feet of disturbance within the Buffer, of which all but 150 square feet is considered temporary disturbance. Approximately 1,200 square feet of temporary disturbance is proposed within a Buffer Exemption Area and approximately 350 square feet of temporary disturbance is proposed within the Buffer. An additional 150 square feet of permanent disturbance is proposed within the Buffer for the concrete pads at the Deal Island Road pump station. Other than the impacts to the Buffer, there are no other Habitat Protection Areas within the project boundaries.

P. 02

Planting Agreement for State/Local Projects

State/Local Agency **Project Number** Somerset County Sanitary District Commission PA152-06 **Agency Contact** Phone Number RobertStreet 410.651.3831 **Commision Approval Date CAC Planner** K. Gallo **Project Name** North Princess Anne Utility Upgrades **Project Location** Town of Princess Anne Square Feet Cleared in 100ft Buffer (Non-BEA) Mitgation Ratio Mitigation Total Outside Buffer 500 3 to 1 @ 1,500 Square Feet Disturbed/Cleared in Buffer (BEA) Mitgation Ratio Mitigation Total Inside Buffer 1,200 2 to 1 2,400 15% Afforestation Requirement Planting for Stormwater Offset **Anticipated Planting Date** Year **Total Planting Due** X SEPT-OCT X 2006 3,900 square feet Attach a Planting Plan which provides a graphical depiction of the location and layout of plantings as well as a schedule listing species, number of plants and size of stock. > PREVIOUSLY SUBMITTED ROBERT STREET Responsible Contact for Mitigation (Print) FOR CAC STAFF USE ONLY Completed By First Site Visit Date Completed by Second Site Visit Date **Date Mitigation Complete** Notes: MAY 2006 CRITICAL AREA COMMISSION Chesapeake & Atlantic Coastal Bays



Robert L. Ehrlich, Jr., Governor Michael S. Steele, Lt. Governor C. Ronald Franks, Secretary

February 28, 2006

Tracey Gordy, Regional Planner MDP Lower Eastern Shore Regional Office 201 Baptist St., Suite 24 Salisbury, MD 21801

RE: North Princess Anne Utility Upgrades, DBF# 044C027B1, Somerset Co., MD

Dear Ms. Gordy:

After further review of this proposed projects and the site meeting we participated in on Feb. 24, 2006, I offer the following comments:

- 1) Work in the area of the bridge over Manokin River at intersection of Rt. 13 and Rt. 363, west-side of highway: No concerns. This portion of project should not impact the endangered Sensitive Joint Vetch and Small-fruited Beggars Ticks.
- 2) Work south of #1 in highway ROW on west-side of Rt. 13: No concerns. The pipe boring will be under the river, not impacting the marsh, and the tie-in occurs on upland, not habitat for either species. I recommend standard silt fencing around the boring and tie-in areas.
- 3) Complete replacement of sewer line at Front Street: Standard sediment and erosion control BMPs should be used. However, at the terminal end of the sewer line (where it is on the banks of the unnamed tributary) a turbidity curtain should be placed parallel to shore during the entire project to avoid excessive siltation to the Sensitive Joint Vetch downstream, should a storm event occur.

If you have further need for comments or questions on this correspondence, please contact me at our Wye Mills office (410-827-8612 x103 or <a href="mailto:sasmith@dnr.state.md.us">sasmith@dnr.state.md.us</a>).

Sincerely,

Scott A. Smith
Regional Heritage Ecologist
DNR-Wildlife & Heritage Services

ER#2005.2640.som

Cc: L. Byrne, W. Tyndall, DNR

J. Taylor, Davis, Bowen & Friedel, Inc.

K. Gallo, CAC

M. Ratnaswamy, USFWS



Robert L. Ehrlich, Jr., Governor Michael S. Steele, Lt. Governor C. Ronald Franks, Secretary

February 7, 2006

Joshua Taylor Davis, Bowen & Friedel, Inc. One Plaza East, Suite 200 PO Box 93 Salisbury, MD 21803-0093

RE: North Princess Anne Utility Upgrades, DBF# 044C027B1, Somerset Co., MD

Dear Mr. Taylor:

After further review of your proposed projects and the photos you sent in an e-mail dated Jan. 25, 2006, I have determined that your project will have no impact on Sensitive Joint Vetch and Small-fruited Beggars Ticks. The directional boring you plan to do will be underground and not affect these species. The tie-in with the existing line will occur in a mowed field away from the marsh and naturally vegetated wetland edge, thus will not impact the rare species. I recommend standard silt fencing around the boring and tie-in areas. If you have further need for comments or questions on this correspondence, please contact me at our Wye Mills office (410-827-8612 x103 or <a href="mailto:sassmith@dnr.state.md.us">sassmith@dnr.state.md.us</a>).

Sincerely,

Scott A. Smith
Regional Heritage Ecologist
DNR-Wildlife & Heritage Services

ER#2005.2640.som

Cc: L. Byrne, DNR

W. Tyndall, DNR K. Gallo, CAC

M. Ratnaswamy, USFWS

### Gallo. Kerrie

From: Byrne, Lori

Sent: Tuesday, February 07, 2006 3:01 PM

To: Smith, Scott A.; Larney, Tim

Cc: Tyndall, Wayne; Gallo, Kerrie; 'Mary\_Ratnaswamy@fws.gov'; Limpert, Roland

Subject: RE: Princess Anne Utility Upgrades - DNR Environmental Review

Hi All,

In an effort to ensure that we are all on the same page (literally) with this project, I am sending this email to let you know that I just spoke with Joshua Taylor of Davis, Bowen & Friedel about the project drawings in regards to the response Scott had sent. My intent was to clarify that he was soliciting comments on all areas proposed for impact that might support the population of Aeschynomene virginica, and after speaking with him it's clear that the tie-in site (at MD 363 Rt 13 and Manokin River) is not an issue, beyond the silt fence Scott had requested in his letter. However, there are a few impacts that show within the wetlands boundary, and although they are small areas of impact, they are within the immediate area known to support this listed plant population, and are a potential concern. One is a test pit and then a cut/plug/abandon site along the existing force main, so the area might vary depending on how quickly the main is located.

In summary, Mr. Taylor is sending me updated site plans overnight (hopefully) to see if the impacts are acceptable. I will notify you as soon as they arrive and we can evaluate...

Thanks! Lori

PS - As I am ready to send this message I just received a call from Joe Kincaid the reviewer at MDE, and I explained our potential remaining concerns. He was not considering the WSSC as an issue, so the permit has been issued, but we agreed to chat after I get the overnight package.

The end.

-----Original Message-----From: Smith, Scott A.

Sent: Tuesday, February 07, 2006 12:40 PM

To: 'Josh Taylor'

**Cc:** Byrne, Lori; Tyndall, Wayne; Gallo, Kerrie; 'Mary\_Ratnaswamy@fws.gov' **Subject:** RE: Princess Anne Utility Upgrades - DNR Environmental Review

Josh:

Attached is my response. I am also mailing a hard copy.

Scott

Scott A. Smith
Eastern Region Ecologist
DNR-Wildlife & Heritage Services
PO Box 68
Wye Mills, MD 21679
410-827-8612 x103

-----Original Message-----**From:** Josh Taylor [mailto:jjt@dbfinc.com]

Sent: Wednesday, January 25, 2006 4:14 PM

To: Smith, Scott A.

Subject: Princess Anne Utility Upgrades - DNR Environmental Review

### Scott,

We spoke briefly yesterday about sensitive/endangered plants in the vicinity of the Manokin River & RT 13 in Princess Anne. I faxed you the DNR letter and site plan yesterday. I wanted to forward you some photos of the site in question to show you that all of the disturbance will be taking place within mowed road right of ways along RT 13. I tried to indicate the vicinity of the disturbance with a circle on the photos. Our environmental consultant (Thom Nobile w/ERI) told me yesterday that as long as the work is taking place in a mowed grassy area, there usually isn't much concern. But Kerrie Gallo with the Critical Area Commission wants some indication from DNR to follow up to the letter from Lori Byrne.

Please contact me when you get a minute to review the info I sent and let me know if you have any questions or comments.

Thanks, Josh

Davis, Bowen & Friedel, Inc. Architects - Engineers - Surveyors P.O. Box 93 Salisbury, MD 21803 410-543-9091 410-543-7675(fax) jjt@dbfinc.com

No virus found in this outgoing message. Checked by AVG Free Edition.

Version: 7.1.375 / Virus Database: 267.14.22/239 - Release Date: 1/24/2006

### Gallo, Kerrie

From: Smith, Scott A.

Sent: Tuesday, February 07, 2006 3:12 PM

To: Byrne, Lori; Larney, Tim

Cc: Tyndall, Wayne; Gallo, Kerrie; 'Mary\_Ratnaswamy@fws.gov'; Limpert, Roland

Subject: RE: Princess Anne Utility Upgrades - DNR Environmental Review

To clarify things, the information I received from Mr. Taylor and the phone discussion I had with him did not indicate anything about wetland impacts or that anything would occur in the area of Aeschynomene. I find it interesting that he did not fully disclose to me the test pit or the other area that Lori describes. All we discussed was the boring under the Manokin and the tie-in.

Scott A. Smith
Eastern Region Ecologist
DNR-Wildlife & Heritage Services
PO Box 68
Wye Mills, MD 21679
410-827-8612 x103

### **MEMORANDUM**

Date: January 12, 2007

To: Roland Limpert, ERU

From: Lori Byrne, WHS

Re: FRG-07-145, Phragmites Control with Rodeo (Glyphosate) off of Broad

Street, Ditch into Manokin River, Somerset County

The WHS database indicates that downstream of the proposed treatment site there are occurrences of state- and federally-listed Sensitive Joint-vetch (*Aeschynomene virginica*), state rare Tickseed Sunflower (*Bidens coronata*) and state-listed endangered Small-fruited Beggar-ticks (*Bidens mitis*) that occur downstream of the proposed treatment site, as close as 1000 feet.

We would request that the applicant coordinate with Scott Smith of our staff (410-827-8612) prior to treatment of the area, as it may be necessary to determine the current extent of the RT&E plant populations in order to avoid adverse impacts to these important native species. Generally, we would request very careful application of the herbicide by hand/backpack sprayer, in order to reduce the likelihood of impacting nontarget plant species.

It is also important to note that this portion of the Manokin River is designated in state regulations as a Nontidal Wetland of Special State Concern (NTWSSC) and regulated by MDE. This wetland is designated as such for the presence of these RT&E species.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

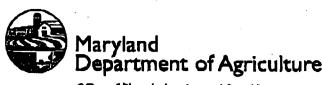
ER# 2006.3095.so

Cc: S.A. Smith, WHS

W. Knapp, WHS

L. Hoerger, CAC

M. Ratnaswamy, USFWS



Office of Plant Industries and Pest Management

Robert L. Ehrlich, Jr., Governor Michael S. Steels, Lt. Governor Lewis R. R(ley, Secretary John R. Brooks, D.V.M., Deputy Secretary The Wayne A. Cawley, Jr. Building 50 Harry S. Truman Perkway Annapolis, Maryland 21401 TTY Users: Call via Meryland Relay Incornet www.mda.stace.md.us

4105437675

410.841.5700 Baltimore/Annapolis 301.261.8106 Washington, D.C. 410.841.5914 Pax 800,492,5590 Toli Free

Agriculture | Marytond's Leading Industry

December 6, 2006

Mr. Matthew Mathias Project Manager Davis Bowen & Freidel, Inc. One Plaza East Suite 200 Salisbury, MD 21803

Dear Mr. Mathias:

This letter is to record the recommendations I made in the discussion we had on the 28 of November. On that date we met on site at the UMES campus in Princess Anne to review a wetlands mitigation project that you are managing. It was requested of my office to provide expertise in vegetation management, specifically management of the porcelain berry (Ampelopsis brevipendunculata) and some additional vegetation.

Subsequently, discussion with Mr. Gerald Skipper, (Eastern Shore Administrator for Wood Management) has confirmed my original recommendations. The porcelain berry can be controlled with either glyphosphate or triclopyr. Both these products have numerous formulations; due to the specifics of the site (wetland) it will be required that a formulation suitable for water presentation (aquatics, category 5) is used (Rodeo, Garlon3A). I would prefer to see an early application of glyphosphate tank mixed with triclopyr on or about the first of July, a refreat to target escapes and misses to occur two weeks subsequent. A second series of application then could occur on or about September 15, 2007. This September application would clean up any regrowth or any seed sprouts that occurred. The end result would be an effectively clean site that might be planted as long as continuing maintenance was accomplished. Normally it is recommended that a site go through two years of treatments prior to planting to ascertain the effectiveness of treatment. In the application plan I have outlined it is possible, that after onsite evaluation to determine the efficacy of treatment, site could be planted the fail of 2007. Many things can influence the efficacy of treatment so much will depend on continuing review of the initiated control program.

The outlined control program would cost between \$1000 to \$2000 to accomplish. The control program will control all vegetation within the spray area as the herbicides have limited

4105437675

selectivity. The applications will be done with high pressure handgun and hand sprayer, the skill of the applicator will be a selective criteria. The applicator will be certified in Category 5. Feel free to contact me through this office should you have any questions.

Sincerely,

Mark J. Smith

Agronomist, Weed Control

cc: Mr. Skipper Jeff Fitzhugh



### ARCHITECTS ENGINEERS SURVEYORS

Gerald G. Friedel, P.E. Michael R. Wigley, AIA Randy B. Duplechain, P.E. Charles R. Woodward, Jr., L.S. Jo Anne Williams, P.E. Charles A. Hauser, P.E.

January 23, 2006 (REVISED February 13, 2006)

Maryland Department of Natural Resources D-3 Tawes State Office Building 580 Taylor Avenue Annapolis, MD 21401

ATTN:

Ms. Kerrie Gallo

RE:

North Princess Anne Utilities Upgrades

Somerset County Sanitary District

Princess Anne, Maryland DBF #044C027D4

Dear Ms. Gallo:

Enclosed for your review, please find a partial set of revised permit drawings for the North Princess Anne Utility Upgrades project. These drawings should replace those submitted to your attention on November 21, 2005. The disturbance data has also been updated, as indicated herein.

### Discussion:

The Somerset County Sanitary District is proposing various utility upgrades in Princess Anne, including the installation of approximately 10,800 feet of new force main, 2,600 feet of new water main, and the replacement of 480 feet of gravity sewer. All of the work will be completed in SHA and County Right of Ways or within easements that have been obtained by the Somerset County Sanitary District. The objective of the proposed sewer upgrades is to relieve capacity issues with the existing gravity sewer system and pump stations. The upgrade would also increase the capacity of the system to accommodate recent and future anticipated growth within Princess Anne. The following is a description of work included in this project:

The sewage pump station on Hickory Lane will be upgraded to increase its capacity. From this pump station a force main will be installed which will run directly to the Princess Anne Wastewater Treatment Plant (WWTP). The force main will be installed by trenchless methods beneath all MD-SHA maintained roads, as indicated on the drawings.

Where the force main reaches the wetland buffer near the Manokin River, the force main will be directional bored approximately 1,600 feet, under the Manokin River and its 100' Critical Area Buffer to minimize disturbances to the wetland buffer and 100' Buffer. The force main will then run to the WWTP and discharge into the existing wet well.

The Deal Island Road pump station will also be upgraded. The existing 6 inch force manifolded to the new force main to allow for discharge to the WWTP.

FEB 1 6 2006

Ms. Kerrie Gallo Maryland Department of Natural Resources January 23, 2006 (REVISED February 13, 2006) Page 2

The water main being proposed will tap into the existing main on Somerset Avenue and connect to an existing main on Carol Lane, as shown on the plans, to improve water system pressure and fire protection. The water main will also be installed by trenchless methods beneath all MD-SHA maintained roads. All watermain work is outside of the Critical Area.

Along with the addition of force mains and a water main, the existing gravity sewer and manholes from the intersection of Somerset Avenue and Front Street to Manhole MH-44 will be upgraded and installed at a constant slope to allow for additional capacity to the Broad Street pump station.

The project will disturb the Critical Area Buffers at two sites. The first site will be the gravity sewer replacement along Front Street. The sewer is located within the Intensely Developed Area (IDA) and the Buffer Exemption Area (BEA). The gravity sewer replacement will cause approximately 1,230 square feet of temporary disturbances to the IDA (outside of the 100' Buffer) and approximately 1,200 square feet of temporary disturbance to the BEA within the 100' Buffer. Total temporary disturbance within the Critical Area at this site would be 2,430 square feet.

The second site affected would be along U.S. Route 13. The proposed force main will be installed by using an open cut within the Critical Area to a point outside of the 100' Buffer. The force main will then be directionally bored beneath the Manokin River and associated wetlands. The IDA will be affected due to the addition of a new wet well and generator at the Deal Island Road pump station, requiring about 400 square feet of disturbance within the 100' Buffer (250 sqft temporary, 150 sqft permanent for concrete pads). The existing force main from Deal Island Road Pump Station will be tied into the proposed force main, along Route 13, requiring approximately an additional 100 square feet of temporary disturbance within the 100' Buffer. Total temporary disturbance within the Critical Area for this site outside of the 100' Buffer would be 13,000 square feet, for a total of 13,500 square feet of disturbance within the Critical Area.

### **Conditional Approval Process:**

To qualify for consideration by the Critical Area Commission for Conditional approval, the Somerset County Sanitary District must show that the proposed project has the following characteristics:

The following responses are offered by the Somerset County Sanitary District. Separate responses are given for the gravity sewer replacement and force main portions of this project.

(1) That there exist special features, of a site, or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented.

<u>Force Main:</u> The force main portion of this project involves installation of approximately 10,800' of sewage force main and upgrades to two existing pumping stations. Portions of the project will require temporary disturbance within maintained Right of Ways within the Critical Area and 100' Critical Area Buffer in LDAs and IDAs. The existing Deal Island Road Pump Station and associated force main are currently located within the 100' Critical Area Buffer. Minimal disturbance will be required in the 100' Buffer to connect the existing and proposed force mains and upgrade the pump station.

Gravity Sewer: The gravity sewer replacement portion of this project will include the replacement of approximately 480 feet of 10" gravity sewer with 12" gravity sewer at a constant slope. The replacement

Ms. Kerrie Gallo Maryland Department of Natural Resources January 23, 2006 (REVISED February 13, 2006) Page 3

of 3 existing brick manholes with precast concrete manholes will also be necessary. The proposed 12" sewer pipe will be located in the same location as the existing 10" sewer. This work will be located within the Critical Area IDA with a portion of the work within the 100' Buffer, designated as a Buffer Exemption Area (BEA). The gravity sewer is currently servicing the surrounding properties located in the BEA. If the gravity sewer was to be relocated outside of the 100' Buffer, the properties located in the BEA would no longer have the ability to connect to the gravity sewer collection system.

(2) That the project or program otherwise provides substantial public benefits to the Chesapeake Bay Critical Area Program.

<u>Force Main:</u> This project includes upgrades to the existing Deal Island Road Pump Station which will improve the capacity and control/alarm system for that pumping station, making it less likely to experience a sewer spill within the Critical Area. This project will also eliminate a portion of the existing sewer forcemain that runs along the river bank and under the bridge on Route 13, greatly reducing the potential for a direct sewage leak into the Manokin River.

Gravity Sewer: The gravity sewer replacement portion of this project will increase the capacity of the gravity sewer to reduce gravity sewer backups and decrease the potential for overflows into the adjacent Manokin Branch. The disturbed areas will be re-planted with vegetation that will enhance and improve the existing conditions located on the site.

(3) That the project or program is otherwise in conformance with this Subtitle.

Force Main/Gravity Sewer: To our knowledge, the project in this area will otherwise be in compliance with all the provisions listed in Subtitle 2.

### The Commission must find that the conditional approval request contains the following:

(1) A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized State or Local agency program or project.

Force Main: Since the existing Deal Island Road Pump Station and associated forcemain are located within the 100' Critical Area Buffer, it will be impossible to make the necessary upgrades and tie-in to the new forcemain without disturbance within the 100' Buffer. Construction of a new pump station and forcemain outside of the Critical Area Buffer would require abandonment of the existing pump station and force main. This would require substantially more temporary disturbance within the 100' Buffer and increase construction costs. Disturbances and construction in this area must be approved by the Critical Area Commission.

Gravity Sewer: The work will be conducted within existing easements and Right-of-Ways within the Critical Area. The replacement of the gravity sewer is located within the BEA and IDA. Relocating the sewer outside of the BEA would deny sewer service to existing residents within the BEA. Disturbances and construction located in this area must be approved by the Critical Area Commission.

(2) A proposed process by which the program or project could be so conducted as to conform, insofar as possible, with the approved local Critical Area Program or, if the development is to occur on State-owned lands, with the criteria set forth in COMAR 27.02.05.

Ms. Kerrie Gallo Maryland Department of Natural Resources January 23, 2006 (**REVISED** February 13, 2006) Page 4

Force Main: The sequence of construction is located on the Erosion and Sediment plans. All possible measures are to be taken to prevent pollution of the waters and habitats located in the project site. These construction techniques will be followed throughout the entire duration of project and are in accordance with the Somerset County Soil Conservation District. The project will be conducted entirely within County and State easements and Right of Ways.

Gravity Sewer: The sequence of construction is located on the Erosion and Sediment plans. All possible measures are to be taken to prevent pollution of the waters and habitats located adjacent to the project site. These construction techniques will be followed throughout the entire duration of project and are in accordance with the Somerset County Soil Conservation District. The project will be conducted entirely within County and State easements and Right of Ways.

(3) Measures proposed to mitigate adverse effects of the project or program on an approved local Critical Area Program or, if on State-owned lands, on the criteria set forth in COMAR 27.02.05.

Force Main: Landscape mitigation will be provided as required by the Critical Area Regulations. Disturbances will be within maintained lawns. No tree removal is anticipated; however, the work will require disturbance to approximately 500 square feet of vegetation within the 100' buffer in an LDA which will be mitigated at a 3:1 ratio using seedlings in accordance with the attached mitigation planting. plan. Mitigation will take place within the 100' buffer within the Princess Anne Town Limits.

Gravity Sewer: Landscape mitigation will be provided as required by Critical Area regulations. This area of the project will have temporary disturbances only. Disturbances will be within maintained lawns. No tree removal is anticipated; however, the work will require disturbance to approximately 1,200 square feet of vegetation within the 100' buffer within a BEA which will be mitigated at a 2:1 ration using seedlings in accordance with the attached mitigation planting plan. Mitigation will take place within the 100' buffer within the Princess Anne Town Limits.

We greatly appreciate your assistance with this process. If you have any questions or comments, please contact me at (410) 543-9091.

Sincerely,

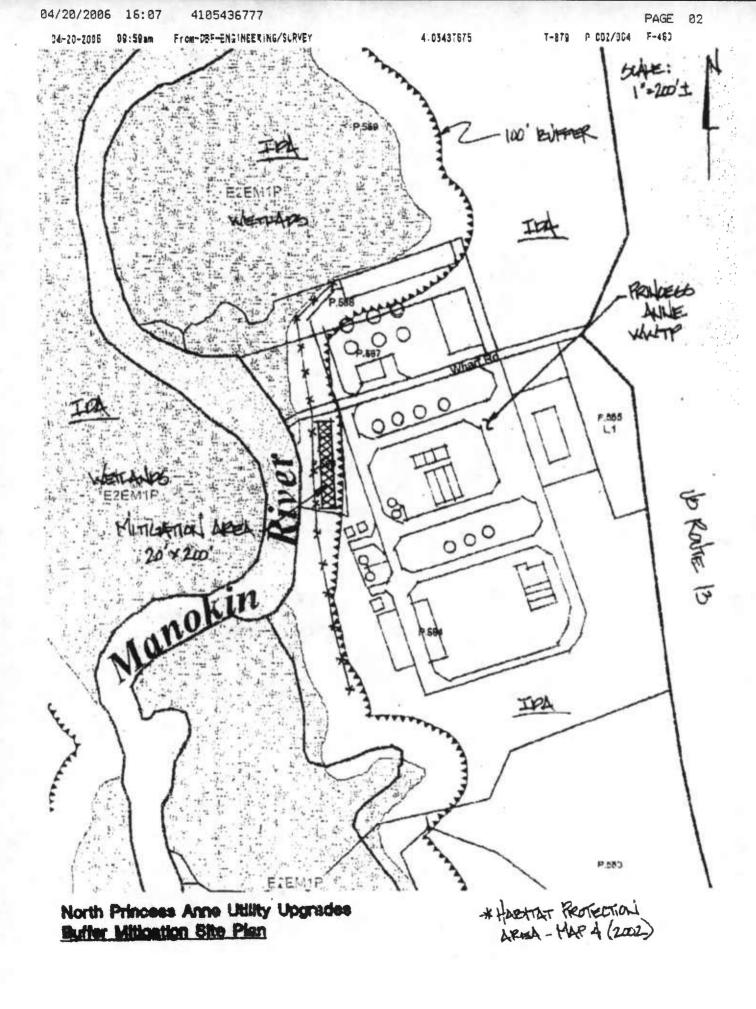
DAVIS, BOWEN & FRIEDEL, INC.

Joshua J. Taylor Project Manager

Enclosures

AKG/hmw/res N:\00\044C\044C027B\Letters\GalloREV021306.doc

> Ms. Tracey Gordy - MD Department of Planning (Salisbury) Mr. Robert C. Street, Jr. - Somerset County Sanitary District

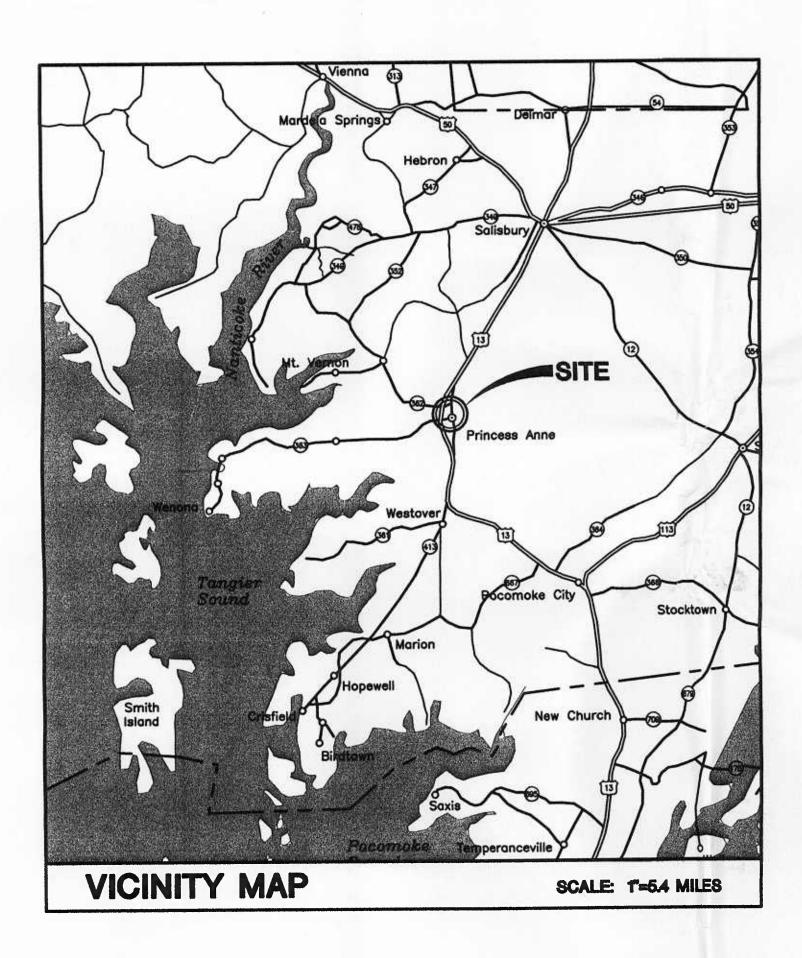


# SOMERSET COUNTY SANITARY DISTRICT NORTH PRINCESS ANNE UTILITY UPGRADES PRINCESS ANNE, MARYLAND

DECEMBER 2005

DBF NO. 044C027

JAN 2 6 2006



## **GENERAL NOTES:**

- . TOPOGRAPHIC SURVEY PERFORMED BY DAVIS, BOWEN, & FRIEDEL, INC., JULY/AUGUST 2005. VERTICAL DATUM BASED ON BENCHMARK P 56 RESET ELEV. 13.86, BM N.G.V.D. 1929.
- 2. ACCORDING TO FEMA/FIRM FLOOD MAPS 2400610175A AND 240063001C, PORTIO
- 3. RIGHT-OF-WAY LINES ARE AS DETERMINED BY THE BEST AVAILABLE INFORMATION AND ARE SHOWN ONLY FOR THE CONTRACTOR'S CONVENIENCE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL RIGHT-OF-WAY LINES AND EASEMENTS PRIOR TO BEGINNING CONSTRUCTION. ALL PROPOSED UTILITIES ARE TO BE CONSTRUCTED WITHIN THE STREET RIGHT-OF-WAY OR EASEMENTS. THE CONTRACTOR SHALL PROVIDE ALL STAKEOUTS NECESSARY FOR THE
- 4. EXISTING UTILITY LOCATIONS ARE SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION, AND ARE SHOWN ONLY FOR THE CONTRACTOR'S CONVENIENCE. THE CONTRACTOR SHALL VERIFY LOCATION, SIZE, MATERIALS AND INVERT OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION, WHETHER OR NOT SHOWN ON THE DRAWINGS, SHALL BE REPAIRED BY THE CONTRACTOR, TO THE UTILITY OWNER'S
- 5. 48 HOURS PRIOR TO ANY EXCAVATION BEING PERFORMED, THE CONTRACTOR SHALL CALL "MISS UTILITY OF DELMARVA" (1-800-282-8555), TO HAVE EXISTING UNDERGROUND UTILITIES LOCATED AND MARKED. IN ORDER TO LOCATE STATE OWNED TRAFFIC SIGNAL FACILITIES, CONTACT MR. ED RODENHIZER AT THE OFFICE OF TRAFFIC AND SAFETY, 410-787-7652. FOR STATE OWNED STREET LIGHTING, CONTACT THE LOCAL RESIDENT MAINENANCE ENGINEER, MR. WAYNE WEICHMAN, R.M.E. SOMERSET COUNTY AT 410-651-1333. PLEASE ALLOW AT LEAST 72 HOURS RESPONSE TIMES FOR STATE FACILITES. THE SOMERSET COUNTY SANITARY DISTRICT SHALL BE NOTIFIED TO LOCATE AND MARK COUNTY OWNED UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATION.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC IN ALL WORK AREAS IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. TRAFFIC CONTROL REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANES OF TRAFFIC AT ALL TIMES, WITH THEIR RELOCATION KEPT TO A MINIMUM DISTANCE
- 7. WHENEVER EXCAVATION DISRUPTS GUY WIRES OR ENDANGERS EXISTING UTILITY POLES, THE POLE SHALL BE BRACE AND/OR GUY WIRES RELOCATED IN ACCORDANCE WITH THE OWNER'S REQUIREMENTS.
- 8. CONTRACTOR SHALL EXERCISE EXTREME CARE AND CAUTION TO PROTECT ALL TREES, SHRUBS, AND LANDSCAPING FROM DAMAGE DURING CONSTRUCTION OPERATIONS UNLESS SPECIFICALLY DESIGNATED TO BE REMOVED.

  9. CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET, OR RECONSTRUCT ALL OBSTRUCTIONS
- IN THE WORK AREA, INCLUDING, BUT NOT LIMITED TO: MAIL BOXES, SIGNS, LANDSCAPING, CULVERTS, FENCES, PROPERTY MARKERS, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS ENCOUNTERED. ALL ASSOCIATED COST SHALL BE INCLUDED IN THE PRICES BID.

  10. ALL PAVING, DRIVEWAYS, CURBS, GUTTERS, SIDEWALKS, ETC., REGARDLESS OF CONDITION, DAMAGED BY THE CONTRACTOR, SHALL BE REMOVED AND REPLACED IN-KIND. COST SHALL BE INCLUDED IN THE UNIT PRICES BID.
- CONTRACTOR, SHALL BE REMOVED AND REPLACED IN—KIND. COST SHALL BE INCLUDED IN THE UNIT PRICES BID.

  11. PAVING DISTURBED SHALL BE RESTORED IN ACCORDANCE WITH THE MARYLAND STATE HIGHWAY UTILITY CONSTRUCTION PERMIT, AND AS SHOWN ON THE DETAILS. WHERE DETAILS ARE PROVIDED, THEY ARE PROVIDED IN ADDITION TO THE UTILITY CONSTRUCTION PERMIT. WHERE DISCREPANCIES BETWEEN THE PERMIT AND DETAILS EXIST, THE PERMIT SHALL
- SUPERSEDE THE DRAWINGS.

  12. THE CONTRACTOR SHALL TOPSOIL, SEED AND MULCH ALL UNPAVED AREAS DISTURBED DURING CONSTRUCTION, ACCORDING TO THE EROSION AND SEDIMENT CONTROL PLAN AND/OR THE REQUIREMENTS OF THE AUTHORITY
- 13. FITTINGS SHOWN ON THE PLANS ILLUSTRATE ANTICIPATED SIZE AND ANGLE OF DEFLECTION. THIS INFORMATION IS SHOWN FOR GENERAL INFORMATION AND IS NOT GUARANTEED. ACTUAL SIZES AND ANGLES MAY VARY DUE TO FIELD CONDITIONS.
- THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DEVIATION FROM THESE PLANS UNLESS WRITTEN APPROVAL HAS BEEN PROVIDED BY THE ENGINEER.
   FORCE MAINS SHALL BE INSTALLED PER THE PLANS AND PROFILES, A MINIMUM OF 4' BELOW GRADE MEASURED FROM THE FINISHED GROUND SURFACE TO THE TOP OF PIPE UNLESS OTHERWISE SPECIFIED. SUBMIT PROPOSED
- FROM THE FINISHED GROUND SURFACE TO THE TOP OF PIPE UNLESS OTHERWISE SPECIFIED. SUBMIT PROPOSED METHODS OF INSTALLATION TO THE ENGINEER FOR APPROVAL. AIR RELEASE VALVES SHALL BE INSTALLED AT ALL HIGH POINTS. WATER MAINS SHALL BE INSTALLED PER PLANS WITH A MINIMUM OF 3.5' OF COVER.

  16. PIPELINE DETECTION TAPE SHALL BE INSTALLED CONTINUOUSLY ALONG THE FORCE MAIN AND WATER MAIN, 12 INCHES
- BELOW THE GROUND SURFACE. THE TAPE SHALL HAVE A MINIMUM WIDTH OF 2" AND BE CAPABLE OF BEING DETECTED BY INDUCTIVE METHODS.
- 17. PROVIDE CONCRETE BUTTRESSES FOR ALL BENDS, TEES AND PLUGS ON THE PROPOSED FORCE MAINS AND WATER MAINS PER DETAILS.
- 18. USE ONLY SUITABLE AND APPROVED GRANULAR MATERIAL FOR BACKFILLING TRENCHES.

  19. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE CONTRACT DOCUMENTS, INCLUDING PLANS,
- NOTES AND SPECIFICATIONS.

  20 CONTRACTOR TO PROVIDE BY-PASS PUMPING, AS NECESSARY, TO KEEP THE SEWER SYSTEMS OPERATIONAL DURING
- CONSTRUCTION ACTIVITIES.
- 21. ALL WORK IS TO BE DONE IN ACCORDANCE WITH REQUIREMENTS OF THE SOMERSET COUNTY SOIL CONSERVATION SERVICE, MARYLAND DEPARTMENT OF THE ENVIRONMENT, CRITICAL AREA COMMISSION, THE MARYLAND STATE HIGHWAY ADMINISTRATION AND ALL AUTHORITIES HAVING JURISDICTION.
- 22. CONTRACTOR SHALL INSTALL POLYETHYLENE PIPE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS PERTAINING TO STORAGE, HANDLING, MINIMUM BENDING RADIUS, FITTINGS, THRUST RESTRAINT, HEAT FUSION CONNECTIONS, TESTING, AND DISINFECTION.
- 23. CONTRACTOR TO MAINTAIN A MINIMUM 18" VERTICAL CLEARANCE BETWEEN SEWER AND WATER PIPING, WITH WATER ABOVE SEWER WHERE FEASIBLE. MAINTAIN 10' HORIZONTAL SEPARATION BETWEEN PARALLEL WATER AND SEWER PIPING. WHERE MINIMUM CLEARANCES CANNOT BE MAINTAINED, WATER MAIN SHALL TRANSITION TO DUCTILE IRON AND BE ENCASED IN CONCRETE FOR A MINIMUM OF 10' ON EACH SIDE OF CROSSING. SEWER PIPING SHALL BE INSTALLED WITH 18" VERTICAL CLEARANCE UNDER ALL OTHER UTILITIES, INCLUDING STORMWATER.
- 24. CONTRACTOR SHALL MEET ALL REQUIREMENTS OF THE MARYLAND FOREST CONSERVATION ACT (FCA), ANNOTATED CODE OF MARYLAND, NATIONAL RESOURCES ARTICLE SECTION 5-1601, ET SEQ., AND REGULATIONS ADOPTED THEREUNDER.
- 25. WHERE CONNECTIONS TO THE EXISTING SYSTEM ARE REQUIRED, THE CONTRACTOR SHALL PROVIDE ALL COUPLINGS, SLEEVES, AND ADAPTERS NECESSARY TO MAKE THE CONNECTION WITHIN THE UNIT PRICES BID.
- 26. THE SANITARY DISTRICT PERSONNEL SHALL OPERATE ALL VALVES AND EQUIPMENT. THE CONTRACTOR SHALL ASSIST THE SANITARY DISTRICT AS NECESSARY TO OBTAIN ISOLATION FOR THE CONNECTION OF NEW MAIN TO EXISTING.
- 27. THE CONTRACT DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS OF CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE PERFORMED IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF
- 1970, AS AMENDED, AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

  28. IN ACCORDANCE WITH CODE OF MARYLAND REGULATIONS (COMAR) 26.04.01.33, DIRECT AND INDIRECT ADDITIVES, SUPPLIERS OF WATER SHALL ONLY USE PRODUCTS (ANY MATERIALS THAT COME IN CONTACT WITH WATER INTENDED FOR USE IN PUBLIC WATER SUPPLY) THAT MEETS THE APPLICABLE AMERICAN NATIONAL STANDARDS INSTITUTE / NSF INTERNATIONAL (ANSI/NSF) STANADARDS FOR DIRECT OR INDIRECT DRINKING WATER ADDITIVES. THE PRODUCTS CAN

ALSO BE CERTIFIED BY AN ORGANIZATION HAVING A THIRD PARTY CERTIFICATION PROGRAM ACCREDITED BY THE A.N.S.I.



# INDEX OF DRAWINGS

0 .... TITLE SHEET

K .... KEY MAP

1 - 6 .... SITE PLANS / PROFILES

7-8 .... SITE & UTILITY DETAILS
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ESC15 .... ES.C. NOTES AND DETAILS

6 .... PUMP STATION SITE PLANS

7 .... PUMP STATION DETAILS

18 .... HICKORY LANE PUMP STATION DETAIL

19 .... DEAL ISLAND ROAD PUMP STATION DETAIL

E1-E2 .... ELECTRICAL DETAILS

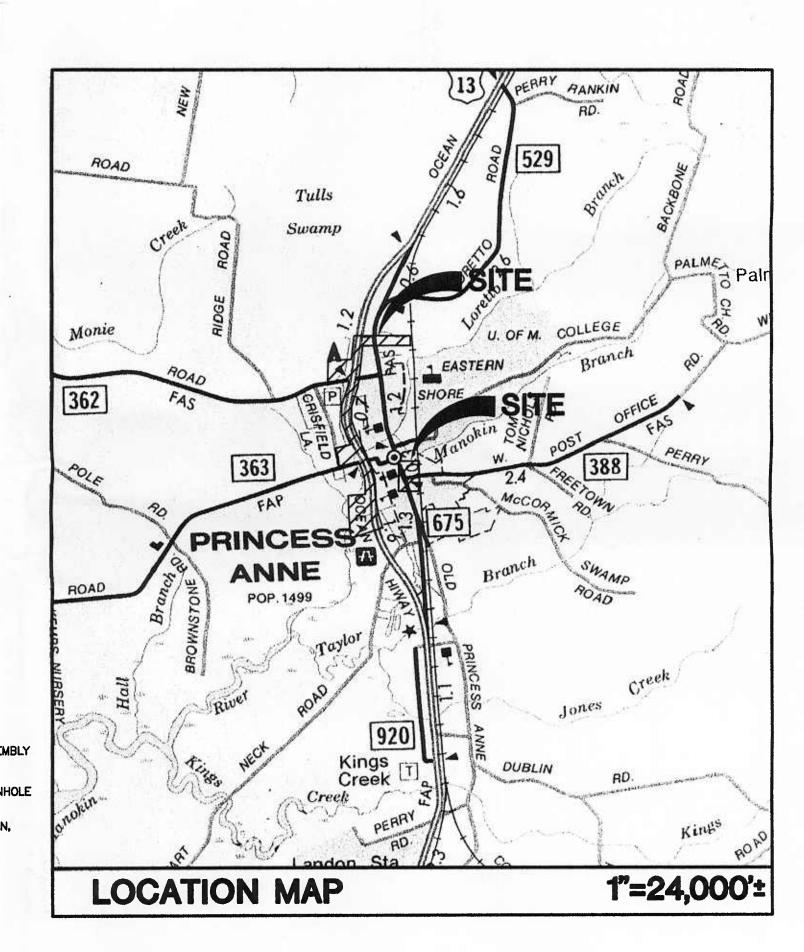
ARCHITECTS ENGINEERS SURVEYORS

SALISBURY, MARYLAND (410) 543-9091

MILFORD, DELAWARE (302) 424-1441

# LEGEND

EXISTING		PROPOSED	
EX.8*W+	WATER MAIN, VALVE, HYDRANT ASSEMBLY	-8*W	WATER MAIN, VALVE, HYDRANT ASSE
— —EX.6"FM——	SEWER FORCE MAIN	C.O. o	
→ EX.8"SS —	SEWER MAIN, MANHOLE	-8"SO	GRAVITY SEWER, CLEAN OUT & MAN
E	CATCH BASIN, STORM DRAIN, FLARED END SECTION UNDER GROUND ELECTRIC	→8*F.MO	SEWER FORCE MAIN. BORE LOCATION AIR RELEASE VALVE ASSEMBLY
<u> </u>	UNDER GROUND ELECTRIC		UTILITY BORE LOCATION, CASING &
• • • • •	POWER POLE / POWER POLE W/ GUY WIRE	UE	CARRIER PIPE UNDERGROUND ELEC.
P	SIGN		UNDERGROUND LLEG.
<b>D</b>	MAILBOX		PAVEMENT RESTORATION
	BUILDING	V V	CONCRETE
	CURB AND GUTTER		
	CURB	200	GRAVEL
2987 GS 2.72 +	TOPOGRAPHIC SPOT ELEVATION		
X	FENCE	~~~	TREELINE
○ <b>*</b>	DECIDUOUS TREE, EVERGREEN TREE & TREE LINE		FENCE
			LIMIT OF DISTURBANCE
	R.O.W. LINE / PROPERTY LINE		
	TIDAL WETLANDS BOUNDARY, FLAGGING	s	SILT FENCE
	NON-TIDAL WETLANDS / BUFFER	AGLP.	AT GRADE INLET PROTECTION
	100 FOOT WETLANDS BUFFER WITHIN CRITICAL AREA		
	WATERWAY / CENTER OF SWALE OR DITCH		



# FOR REVIEW ONLY

APPROVED BY	SOMERSET COUNTY SANITARY DISTRICT:	
SIGNATURE:		
DATE:		

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