

JA-036

**Contents for Stormwater Management Facilities As-built Files**

Each file is to contain:

- ① As-built plan
- ② Completed construction certification
3. Construction Plan
4. Design Calculations
5. Watershed Map
- ⑥ Maintenance Agreement
7. Correspondence with owners
8. Inspection Records
9. Enforcement Actions

970 015943

DECLARATION OF COVENANTS

INSPECTION/MAINTENANCE OF DRAINAGE SYSTEM

THIS DECLARATION, made this September 22, 1997, between Governors Land Associates and all successors in interest, hereinafter referred to as the "COVENANTOR(S)," owner(s) of the following property: River Reach, Block C, Governor's Land at Two Rivers, Deed Book 501, Page No. 498 or Instrument No. \_\_\_\_\_, and James City County, Virginia, hereinafter referred to as the "COUNTY."

WITNESSETH:

We, the COVENANTOR(S), with full authority to execute deeds, mortgages, other covenants, and all rights, titles and interests in the property described above, do hereby covenant with the COUNTY as follows:

1. The COVENANTOR(S) shall provide maintenance for the drainage system including any runoff control facilities, conveyance systems and associated easements, hereinafter referred to as the "SYSTEM," located on and serving the above-described property to ensure that the SYSTEM is and remains in proper working condition in accordance with approved design standards, and with the law and applicable executive regulations. The SYSTEM shall not include any elements located within any Virginia Department of Transportation rights-of-way.

2. If necessary, the COVENANTOR(S) shall levy regular or special assessments against all present or subsequent owners of property served by the SYSTEM to ensure that the SYSTEM is properly maintained.

3. The COVENANTOR(S) shall provide and maintain perpetual access from public right-of-ways to the SYSTEM for the COUNTY, its agent and its contractor.

4. The COVENANTOR(S) shall grant the COUNTY, its agent and its contractor a right of entry to the SYSTEM for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the SYSTEM.

5. If, after reasonable notice by the COUNTY, the COVENANTOR(S) shall fail to maintain the SYSTEM in accordance with the approved design standards and with the law and applicable executive regulations, the COUNTY may perform all necessary repair or maintenance work, and the COUNTY may assess the COVENANTOR(S) and/or all property served by the SYSTEM for the cost of the work and any applicable penalties.

6. The COVENANTOR(S) shall indemnify and save the COUNTY harmless from any and all claims for damages to persons or property arising from the installation, construction, maintenance, repair, operation or use of the SYSTEM.

7. The COVENANTOR(s) shall promptly notify the COUNTY when the COVENANTOR(S) legally transfers any of the COVENANTOR(S)' responsibilities for the SYSTEM. The COVENANTOR(S)' shall supply the COUNTY with a copy of any document of transfer, executed by both parties.

8. The covenants contained herein shall run with the land and shall bind the COVENANTOR(S) and the COVENANTOR(S)' heirs, executors, administrators, successors and assignees, and shall bind all present and subsequent owners of property served by the SYSTEM.

9. This COVENANT shall be recorded in the County Land Records.

OCT-16 0252

IN WITNESS WHEREOF, the COVENANTOR(S) have executed this DECLARATION OF COVENANTS as of this 25 day of Sept, 1997.

COVENANTOR(S)

[Signature]  
Raymond E. Keeney  
Director of Development

ATTEST:

\_\_\_\_\_

COVENANTOR(S)

\_\_\_\_\_

ATTEST:

\_\_\_\_\_

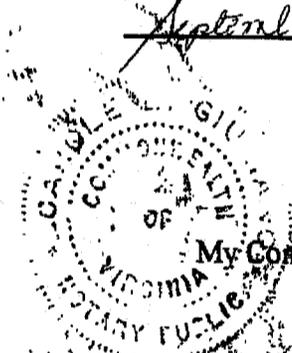
COMMONWEALTH OF VIRGINIA  
CITY/COUNTY OF James City

I hereby certify that on this 25 day of September, 1997, before the subscribed, a Notary Public of the State of Virginia, and for the County of James City, aforesaid personally appeared Raymond E. Keeney and did acknowledge the foregoing instrument to be their Act.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 25 day of September, 1997.

[Signature]  
Notary Public

My Commission expires: May 31, 1998



Approved as to form:

[Signature]

001-16 0253

This Declaration of Covenants prepared by:

Raymond E. Keeney  
(Print Name)  
Director of Development  
(Title)  
2700 Two Rivers Road  
(Address)  
Williamsburg Va 23185  
(City) (State) (Zip)

VIRGINIA: City of Williamsburg and County of James City, to Wit:  
In \_\_\_\_\_ office of the Circuit Court of the City of Williamsburg and County of James City this \_\_\_\_\_ day of Oct, 1997. This Consensus was prepared by \_\_\_\_\_ in certificate annexed and signed and recorded at 3:49 o'clock  
Teste: Richard S. Ward, Clerk  
by [Signature]  
Deputy Clerk

Prepared by Governor's Land Associates  
2700 Two Rivers Road  
Williamsburg, VA 23185

980024982

**EXEMPT FROM RECORDATION TAX  
UNDER VIRGINIA CODE SECTION 58.1-811(D), AS AMENDED**

**DEED OF EASEMENT  
FOR MAJOR OPEN SPACE #38  
TWO RIVERS POINT**

**THIS DEED OF EASEMENT**, made as of November 1<sup>st</sup>, 1998, by and among GOVERNOR'S LAND ASSOCIATES, a Virginia general partnership and its heirs, successors and assigns ("Grantor"); and COUNTY OF JAMES CITY, VIRGINIA ("Grantee").

**WHEREAS**, the Grantor is the owner of certain property known as Open Space 38, Two Rivers Point, The Governor's Land at Two Rivers (the "Property");

**WHEREAS**, Grantee has adopted The Chesapeake Bay Preservation Ordinance, Chapter 23 of the James City County Code, as required by Chapter 21 of Title 10.1 of the Code of Virginia, to protect the Chesapeake Bay and its tributaries from nonpoint source pollution from land uses or appurtenances within the Chesapeake Bay drainage area.

**WHEREAS**, Grantor wishes to preserve portions of the Property as natural open space as part of Grantor's efforts to improve the quality of stormwater runoff from the Property.

**NOW THEREFORE, THIS DEED WITNESSETH**, that for and in consideration of the premises and the sum of TEN DOLLARS (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor does hereby grant and convey to Grantee an easement in perpetuity in gross, with the right in perpetuity to restrict the use as described below, of the portions herein described of these certain tracts, lots, pieces or parcels of land with improvements thereon ("Easement Property"), containing Major Open Space #38 more or less, to wit:

Exhibit "A" Plat of Residual Parcel Two Rivers Point, The Governor's Land at Two Rivers.

The restrictions hereby imposed on the use of the Easement Property, the acts which the Grantor covenants to do or not to do and the restrictions which the Grantee is hereby entitled to enforce, shall be as follows:

1. The Easement Property shall be kept free and clear of any junk, trash, rubbish and other unsightly or offensive material.

DEC 26 01 05

2. No building shall be permitted on or lots platted within the Easement Property, except that portions of the RPA Buffers and RPA Wetlands Buffers, as shown on the Plat (collectively, the "Buffers", can be included as part of platted lots as shown on the Plat.
3. No roads or other structures (excluding utility lines, drainage facilities, paths and trails or signs approved in accordance with Paragraph 4 below) shall be built or maintained on the Easement Property other than such road or structure approved in writing by the County Engineer and the Planning Commission. Any roads shall be generally as shown on the approved Master Plan for the Governor's Land at Two Rivers.
4. No signs (including billboards or outdoor advertising), paths or trails, utility lines, irrigation systems or drainage facilities shall be placed on the Easement Property without the expressed written consent of the County Engineer and the Planning Commission or in accordance with a signage plan, path or trail plan, drainage plan, irrigation plan or utility plan approved in writing by the County Engineer and the Planning Commission.
5. The Easement Property shall remain in its natural condition with respect to natural leaf litter or other ground covering vegetation, understory vegetation or shrub layer and tree canopy. The activities of Grantor within the Easement Property shall be limited to those activities which do not remove or damage any significant amount of healthy vegetation or materially disturb any soil except as approved by the County Engineer under this paragraph or in connection with approvals obtained in accordance with Paragraphs 3 and 4 above. Grantor may use hand tools (such as chain saws, wood chippers, and stump grinders) for selective trimming and pruning and the clearing of understory which would not alter the natural character of the Easement Property only in a location and manner approved by the County Engineer.
6. Grantee and its representatives may enter upon the Easement Property from time to time for inspection, to enforce the terms of this Easement and, as to all of the Easement Property other than the Buffers, to post a sign or marker identifying Grantee's interest in the Easement Property (other than the Buffers) as natural open space and/or major open space. In the event of a violation of the terms of this Easement, the Grantee shall have the right to seek all appropriate legal and equitable relief, including, but not limited to, the right to restore the Easement Property to its natural condition and assert the cost of such restoration as a lien against the Easement Property, provided that Grantee shall notify Grantor at least thirty days in advance of any proposed action with respect to the Easement Property, describing the condition Grantee considers a violation. Grantor shall have a reasonable opportunity to cure prior to Grantee's exercise of its rights hereunder.
7. Grantee and Grantor may amend the provisions hereof or terminate this Easement by a written instrument signed by both parties.

DEC 28 01 06

- 8. Although this easement in gross will benefit the public in the ways recited above, nothing herein shall be construed to convey a right to the public of access to or use of the Easement Property and the Grantor shall retain exclusive right to such access and use, subject only to the provisions herein recited.

WITNESS the following signatures and seals as of the date first above written.

**GOVERNOR'S LAND ASSOCIATES,**  
A Virginia general partnership

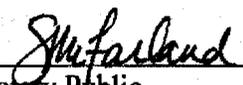
By: **DOMINION LAND MANAGEMENT  
COMPANY - WILLIAMSBURG**  
A Virginia corporation,  
Its Attorney-in-Fact

By:   
Name: W. Allen Ball  
Title: President

STATE OF VIRGINIA  
COUNTY OF JAMES CITY

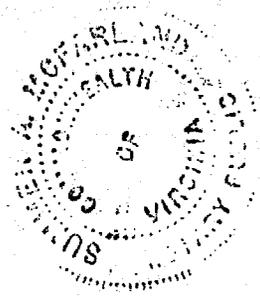
I, the undersigned, a Notary Public in and for the jurisdiction aforesaid, do hereby certify that W. ALLEN BALL, President of DOMINION LAND MANAGEMENT COMPANY - WILLIAMSBURG, a Virginia corporation, Attorney-in-Fact for GOVERNOR'S LAND ASSOCIATES, a Virginia general partnership, whose name is signed to the foregoing Deed, has acknowledged the same before me in the aforesaid jurisdiction as an authorized officer of the corporation on behalf of the partnership.

GIVEN under my hand and seal on November 17th, 1998.

 (SEAL)  
Notary Public

My Commission Expires: 9-30-2002

DEC 28 01 07



The form of this Deed of Easement is approved and, pursuant to Resolution of the Board of Supervisors of James City County, Virginia, duly executed on the 17th day of ~~November 1998~~, this conveyance is hereby accepted on behalf of sad County.  
May, 1993

12/3/98  
DATE

Leo P. Rogers  
DEPUTY COUNTY ATTORNEY

STATE OF VIRGINIA  
COUNTY OF JAMES CITY

I, the undersigned, a Notary Public in and for the jurisdiction aforesaid, do hereby certify that LEO P. ROGERS, <sup>Deputy</sup> County Attorney for the COUNTY OF JAMES CITY, VIRGINIA, whose name is signed to the foregoing Deed of Easement, has acknowledged the same before me in the aforesaid jurisdiction on behalf of the County.

GIVEN under my hand and seal on ~~November~~ <sup>December</sup> 3rd, 1998.

Mary Frances Rieger (SEAL)  
Notary Public

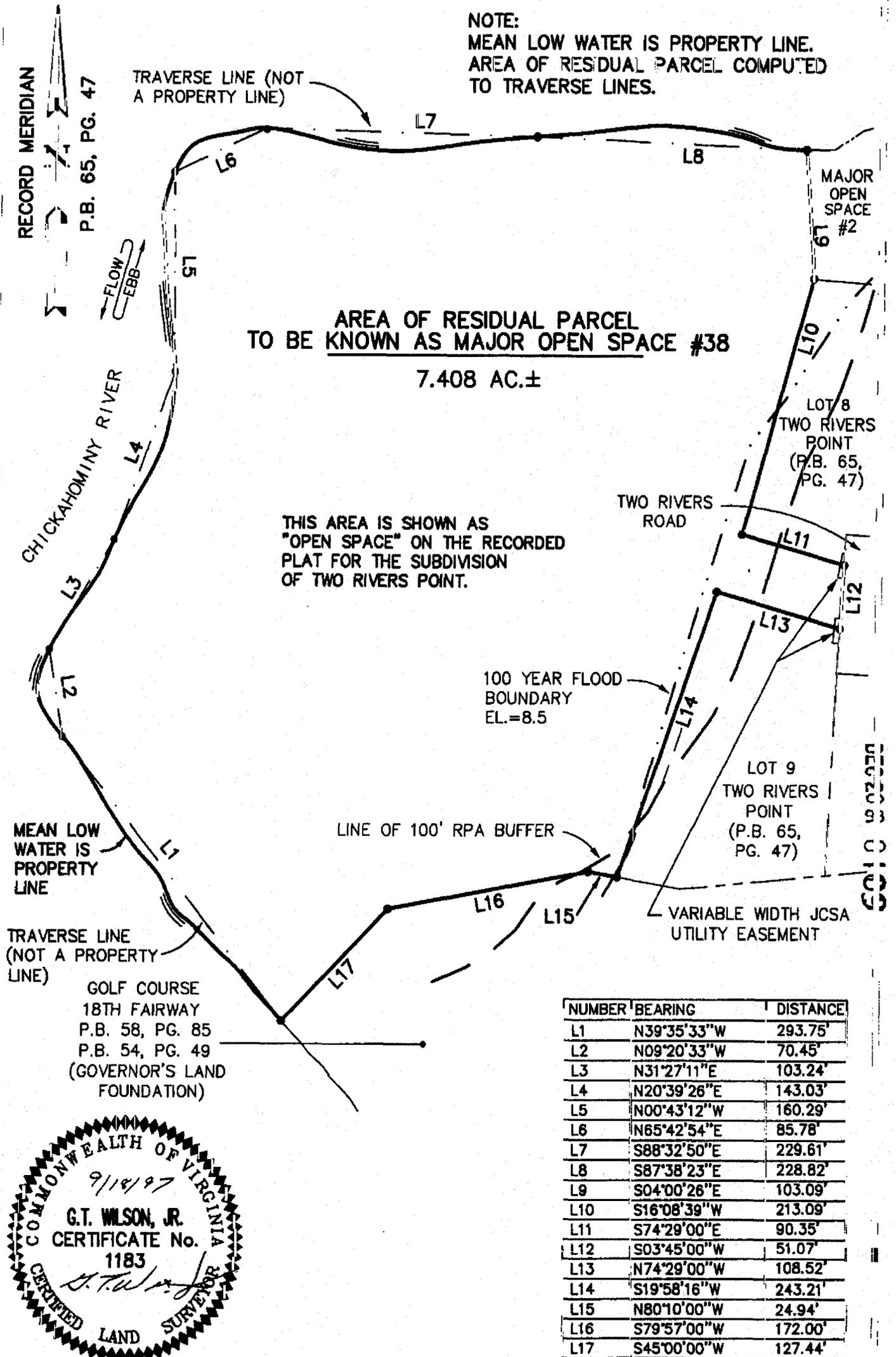
My Commission Expires: Oct. 31, 2001.

PLAT ATTACHED

VIRGINIA: City of Williamsburg and County of James City, to Wit:  
In the Clerk's Office of the Circuit Court of the City of Williamsburg and County of James City the 26 day of December, 1998. This Deed of Easement was presented with certificate annexed and admitted to record at 10:47 o'clock  
Teste: Helene S. Ward, Clerk  
by Helene S. Ward  
Deputy Clerk

DEC 28 01 08

NOTE:  
MEAN LOW WATER IS PROPERTY LINE.  
AREA OF RESIDUAL PARCEL COMPUTED  
TO TRAVERSE LINES.



AREA OF RESIDUAL PARCEL  
TO BE KNOWN AS MAJOR OPEN SPACE #38  
7.408 AC.±

THIS AREA IS SHOWN AS  
"OPEN SPACE" ON THE RECORDED  
PLAT FOR THE SUBDIVISION  
OF TWO RIVERS POINT.

100 YEAR FLOOD  
BOUNDARY  
EL.=8.5

LINE OF 100' RPA BUFFER

VARIABLE WIDTH JCSA  
UTILITY EASEMENT

| NUMBER | BEARING     | DISTANCE |
|--------|-------------|----------|
| L1     | N39°35'33"W | 293.75'  |
| L2     | N09°20'33"W | 70.45'   |
| L3     | N31°27'11"E | 103.24'  |
| L4     | N20°39'26"E | 143.03'  |
| L5     | N00°43'12"W | 160.29'  |
| L6     | N65°42'54"E | 85.78'   |
| L7     | S88°32'50"E | 229.61'  |
| L8     | S87°38'23"E | 228.82'  |
| L9     | S04°00'26"E | 103.09'  |
| L10    | S16°08'39"W | 213.09'  |
| L11    | S74°29'00"E | 90.35'   |
| L12    | S03°45'00"W | 51.07'   |
| L13    | N74°29'00"W | 108.52'  |
| L14    | S19°58'16"W | 243.21'  |
| L15    | N80°10'00"W | 24.94'   |
| L16    | S79°57'00"W | 172.00'  |
| L17    | S45°00'00"W | 127.44'  |



09.18.97-12:18 GL044P02



Consulting Engineers  
Engineers, Surveyors, Planners

5248 Olde Towne Road, Suite 1  
Williamsburg, Virginia 23188  
Ph. (757)-253-0040, Fax (757)-220-8994

PLAT OF RESIDUAL PARCEL  
TWO RIVERS POINT, THE GOVERNOR'S LAND AT TWO RIVERS  
OWNED BY GOVERNOR'S LAND ASSOCIATES

POWhatan DISTRICT

JAMES CITY COUNTY

VIRGINIA

Scale: 1"=100' | Ref: P.B. 65, PG. 47, P.B. 58, PG. 85 | Date: 9/18/97 | Job No: 7173-4-4

980024983

EXEMPT FROM RECORDATION TAX  
UNDER VIRGINIA CODE SECTION 58.1-811(A)(6), AS AMENDED

**DEED OF EASEMENT  
FOR OPEN SPACE/MAJOR OPEN SPACE  
CLUB VILLAS**

**THIS DEED OF EASEMENT**, made as of December \_\_, 1998, by and among GOVERNOR'S LAND ASSOCIATES, a Virginia general partnership and its heirs, successors and assigns ("Grantor"); and COUNTY OF JAMES CITY, VIRGINIA ("Grantee").

**WHEREAS**, the Grantor is the owner of certain property known as Club Villas, The Governor's Land At Two Rivers (the "Property");

**WHEREAS**, Grantee has adopted The Chesapeake Bay Preservation Ordinance, Chapter 23 of the James City County Code, as required by Chapter 21 of Title 10.1 of the Code of Virginia, to protect the Chesapeake Bay and its tributaries from nonpoint source pollution from land uses or appurtenances within the Chesapeake Bay drainage area;

**WHEREAS**, Grantor wishes to preserve portions of the Property as natural open space as part of Grantor's efforts to improve the quality of stormwater runoff from the Property.

**NOW, THEREFORE**, in recognition of the foregoing and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor does hereby grant and convey to Grantee an easement in perpetuity in gross, with the right in perpetuity to restrict the use as described below, of the portions herein described of these certain tracts, lot, pieces or parcels of land with improvements thereon ("Easement Property"), containing 0.057 acres (Open Space 1), .227 acres (Open Space 2), and 4.802 acres (Major Open Space #40) more or less, to wit:

Open Space 1, Open Space 2, Major Open Space Forty (40), CLUB VILLAS, THE GOVERNOR'S LAND AT TWO RIVERS, as the same appears duly dedicated, platted and subdivided on the Plat attached hereto and recorded simultaneously with this Easement in Plat Book 71 at Pages 49 through 52 in the Office of the Clerk of the Circuit Court for the City of Williamsburg and the County of James City, Virginia.

Prepared By:  
Jenkins & Gilchrist,  
a Professional Corporation  
1919 Pennsylvania Avenue, NW  
Suite 600  
Washington, D.C. 20006-3404

REDAL:169221.2 17188-00029

DEC 28 3 01 10

The restrictions hereby imposed on the use of the Easement Property, the acts which the Grantor covenants to do or not to do and the restrictions which the Grantee is hereby entitled to enforce, shall be as follows:

1. The Easement Property shall be kept free and clear of any junk, trash, rubbish and other unsightly or offensive material.
2. No building shall be permitted on or lots platted within the Easement Property, except that portions of the RPA Buffers and RPA Wetlands Buffers, as shown on the Plat (collectively, the "Buffers"), can be included as part of platted lots as shown on the Plat.
3. No roads or other structures (excluding utility lines, drainage facilities, paths and trails or signs approved in accordance with Paragraph 4 below) shall be built or maintained on the Easement Property other than such road or structure approved in writing by the County Engineer and the Planning Commission. Any roads shall be generally as shown on the approved Master Plan for The Governor's Land at Two Rivers.
4. No signs (including billboards or outdoor advertising), paths or trails, utility lines, irrigation systems or drainage facilities shall be placed on the Easement Property without the expressed written consent of the County Engineer and the Planning Commission or in accordance with a signage plan, path or trail plan, drainage plan, irrigation plan or utility plan approved in writing by the County Engineer and the Planning Commission.
5. The Easement Property shall remain in its natural condition with respect to natural leaf litter or other ground covering vegetation, understory vegetation or shrub layer, and tree canopy. The activities of Grantor within the Easement Property shall be limited to those activities which do not remove or damage any significant amount of healthy vegetation or materially disturb any soil except as approved by the County Engineer under this paragraph or in connection with approvals obtained in accordance with Paragraphs 3 and 4 above. Grantor may remove dead, diseased, poisonous or invasive vegetation or the Grantor may use hand tools (such as chain saws, wood chippers and stump grinders) for selective trimming and pruning and the clearing of understory which would not alter the natural character of the Easement Property only in a location and manner approved by the County Engineer.
6. Grantee and its representatives may enter upon the Easement Property from time to time for inspection, to enforce the terms of this Easement and, as to all of the Easement Property other than the Buffers, to post a sign or marker identifying Grantee's interest in the Easement Property (other than the Buffers) as natural open space and/or major open space. In the event of a violation of the terms of this Easement, the Grantee shall have the right to seek all appropriate legal and

DEC 28 0 11 1

equitable relief, including, but not limited to, the right to restore the Easement Property to its natural condition and assert the cost of such restoration as a lien against the Easement Property, provided that Grantee shall notify Grantor at least thirty days in advance of any proposed action with respect to the Easement Property, describing the condition Grantee considers a violation. Grantor shall have a reasonable opportunity to cure prior to Grantee's exercise of its rights hereunder.

- 7. Grantee and Grantor may amend the provisions hereof or terminate this Easement by a written instrument signed by both parties.
- 8. Although this easement in gross will benefit the public in the ways recited above, nothing herein shall be construed to convey a right to the public of access to or use of the Easement Property and the Grantor shall retain exclusive right to such access and use, subject only to the provisions herein recited.

WITNESS the following signatures and seals as of the date first above written.

**GOVERNOR'S LAND ASSOCIATES,**  
a Virginia general partnership

By: **DOMINION LAND MANAGEMENT  
COMPANY - WILLIAMSBURG**  
a Virginia corporation,  
its Attorney-in-Fact

By:   
Name: W. Allen Ball  
Title: President

DEC 28 2008 01:12

State OF Virginia  
County OF James City

§  
§  
§

I, the undersigned, a Notary Public in and for the jurisdiction aforesaid, do hereby certify that W. ALLEN BALL, President of DOMINION LAND MANAGEMENT COMPANY - WILLIAMSBURG, a Virginia corporation, Attorney-in-Fact for GOVERNOR'S LAND ASSOCIATES, a Virginia general partnership, whose name is signed to the foregoing Deed, has acknowledged the same before me in the aforesaid jurisdiction as an authorized officer of the corporation on behalf of the partnership.

GIVEN under my hand and seal on November 17, 1998.

McFarland (SEAL)  
Notary Public

My Commission Expires: 9-30-2002



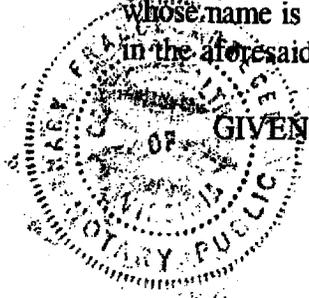
The form of this Deed of Easement is approved and, pursuant to Resolution of the Board of Supervisors of James City County, Virginia, duly executed on the 17<sup>th</sup> day of May, 1993, this conveyance is hereby accepted on behalf of said County.

12/23/98  
DATE

Leo P. Rogers  
COUNTY ATTORNEY

Commonwealth OF Virginia  
County OF James City §  
§  
§

I, the undersigned, a Notary Public in and for the jurisdiction aforesaid, do hereby certify that Leo P. Rogers, County Attorney for the COUNTY OF JAMES CITY, VIRGINIA, whose name is signed to the foregoing Deed of Easement, has acknowledged the same before me in the aforesaid jurisdiction on behalf of the County.



GIVEN under my hand and seal on December 23, 1998.

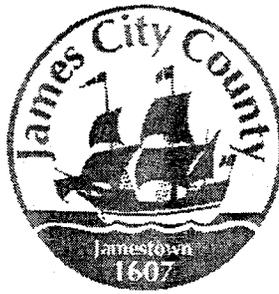
Mary Frances Rieger (SEA)  
Notary Public

My Commission Expires: Oct. 31, 2001.

DEC 28 0 11 4

VIRGINIA: City of Williamsburg and County of James City, to Wit:  
In the Clerk's Office of the Circuit Court of the City of Williamsburg and County of James City the 26 day of December, 1998. This Deed of Easement was presented with certificate annexed and admitted to record at 11:01 o'clock  
Teste: Helene S. Ward, Clerk  
by Helene S. Ward  
Deputy Clerk

PLAT RECORDED IN  
P.B. NO. 71 PAGE 49-52



James City County, Virginia  
Environmental Division

Stormwater Management / BMP Facilities  
Record Drawing and Construction Certification Forms

(Note: In accordance with the requirements of the Chesapeake Bay Preservation Ordinance, Chapter 23, Section 23-10(4), BMP's shall be designed and constructed in accordance with the manual entitled James City County Guidelines for Design and Construction of Stormwater Management BMP's. Erosion and sediment control policy and approved plans generally require that at the completion of the project and prior to release of surety, an "as-built" plan prepared by a registered Professional Engineer or Certified Land Surveyor must be provided for the drainage system for the project, including any Best Management Practice (BMP) facilities. In addition, for BMP facilities involving the construction of an impounding structure or dam embankment, certification is required by a Professional Engineer who has inspected the structure during its construction. Currently there are over 20 water quality type BMP's accepted by the County.)

Section 1 - Site Information:

Project Name: GOLFERS LAND TWO RIVERS POINT  
Structure/BMP Name: WOOD DRY DETENTION STRUCTURE  
Project Location: WEST END OF TWO RIVERS ROAD  
BMP Location: EAST OF REAR LOT LINE OF LOT 3  
County Plan No.: S - 52 - 95

Project Type:  Residential  Business  Commercial  Office  Institutional  Industrial  Public  Roadway  Other \_\_\_\_\_  
Tax Map/Parcel No.: 431050001A  
BMP ID Code (if known): RJR 036  
Zoning District: R-4  
Land Use: RESIDENTIAL  
Site Area (sf or acres): 18.9 Ac

Brief Description of Stormwater Management/BMP Facility: TIMBER STRUCTURE - DRY DETENTION POND

Nearest Visible Landmark to SWM/BMP Facility: COMMUNITY IDENTIFICATION SIGNS/WALLS

Nearest Vertical Ground Control (if known):  
 FCC Geodetic Ground Control  USGS  Temporary  Arbitrary  Other  
Station Number or Name: 348  
Datum or Reference Elevation: NGVD 1929  
Control Description: \_\_\_\_\_  
Control Location from Subject Facility: 6000'± NORTH

**Section 2 - Stormwater Management / BMP Facility Construction Information:**

PreConstruction Meeting Held for Construction of SWM/BMP Facility:  Yes  No  Unknown  
Approx. Construction Start Date for SWM/BMP Facility: 1995  
Facility Monitored by County Representative during Construction:  Yes  No  Unknown  
Name of Site Work Contractor Who Constructed Facility: UNKNOWN  
Name of Professional Firm Who Routinely Monitored Construction: UNKNOWN  
Date of Completion for SWM/BMP Facility: UNKNOWN (6/01/95)  
Date of Record Drawing/Construction Certification Submittal: 12/15/00

*( Note: Record Drawing and Construction Certifications are required within thirty (30) days of the completion of Stormwater Management and/or BMP facility construction. Record Drawings and Construction Certifications must be reviewed and approved by the James City County Environmental Division prior to final inspection, acceptance and bond or surety release. )*

**Section 3 - Owner / Designer / Contractor Information:**

Owner/Developer: *(Note: Site Owner or Applicant responsible for development of the project.)*

Name: GOVERNOR'S LAND ASSOCIATES  
Mailing Address: 90 STONEHURST DEVELOPMENT CO.  
9701 MILL POND RUN TOWN, VA  
Business Phone: 234-5000 Fax: 234-5111  
Contact Person: MR. JAMES H. BENNETT Title: VICE PRESIDENT - DEVELOPMENT

Design Professional: *(Note: Professional Engineer or Certified Land Surveyor responsible for the design and preparation of plans and specifications for the Stormwater Management / BMP facility.)*

Firm Name: AES CONSULTING ENGINEERS  
Mailing Address: 5248 OLDE TOWNE ROAD SUITE 2  
WILLIAMSBURG, VIRGINIA 23188  
Business Phone: 757-253-0040  
Fax: 757-220-8994  
Responsible Plan Preparer: V. MARK BENNETT  
Title: PROJECT ENGINEER / MANAGER  
Plan Name: BA4 POD 4 - GOVERNOR'S LAND  
Firm's Project No. 7173  
Plan Date: 6/1/95  
Sheet No.'s Applicable to SWM/BMP Facility: 6 1 9 1 1 1

BMP Contractor: *(Note: Site Work Contractor directly responsible for construction of the Stormwater Management / BMP facility.)*

Name: UNKNOWN  
Mailing Address: \_\_\_\_\_  
Business Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Site Foreman/Supervisor: \_\_\_\_\_  
Specialty Subcontractors & Purpose (for BMP Construction Only): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Section 4 - Professional Certifications:**

Certifying Professionals: ( Note: A Registered Professional Engineer or Certified Land Surveyor is responsible for preparation of a Record Drawing, sometimes referred to as an As-Built plan, for the drainage system for the project including any Stormwater Management/BMP Facilities. A Registered Professional Engineer is responsible for the inspection, monitoring and certification of Stormwater Management / BMP facilities during its construction. )

**Record Drawing and Construction Certifications for Stormwater Management / BMP Facilities**

**Record Drawing Certification**

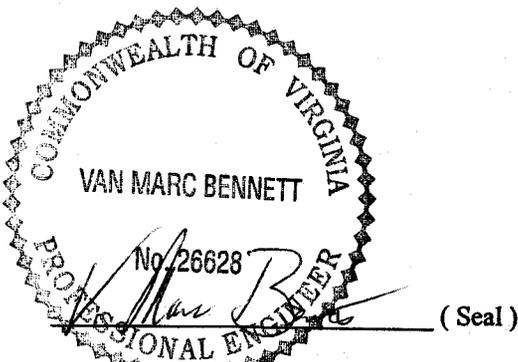
Firm Name: AES CONSULTING ENGINEERS  
Mailing Address: 5248 ODE TOULGE ROAD  
SUITE 1, WILLIAMSBURG, VA  
Business Phone: 753-0240  
Fax: 720-8999  
Name: V. Marc Bennett  
Title: PROJECT MANAGER  
Signature: V. Marc Bennett  
Date: 10/17/01

**Construction Certification**

Firm Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
Business Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

I hereby certify to the best of my knowledge and belief that this record drawing represents the actual condition of the Stormwater Management / BMP facility. The facility appears to conform with the provisions of the approved design plan, specifications and stormwater management plan, except as specifically noted. ON RECORD DRAWINGS

I hereby certify to the best of my knowledge and belief that this Stormwater Management/BMP facility was monitored and constructed in accordance with the provisions of the approved design plan, specifications and stormwater management plan, except as specifically noted.



( Seal )

Virginia Registered Professional Engineer  
or Certified Land Surveyor

( Seal )

Virginia Registered  
Professional Engineer

**Section 5 - Record Drawing and Construction Certification Requirements and Instructions:**

- PreConstruction Meeting - Provides an opportunity to review SWM / BMP facility construction, maintenance and operation plans and address any questions regarding construction and/or monitoring of the structure. The design engineer, certifying professionals (if different), Owner/Applicant, Contractor and County representative(s) are encouraged to attend the preconstruction meeting. Advanced notice to the Environmental Division is requested. Usually, this requirement can be met simultaneously with Erosion and Sediment Control preconstruction meetings held for the project.
- A fully completed ***STORMWATER MANAGEMENT / BMP FACILITIES, RECORD DRAWING and CONSTRUCTION CERTIFICATION FORM*** and ***RECORD DRAWING CHECKLIST***. All applicable sections shall be completed in their entirety and certification statements signed and sealed by the registered professional responsible for individual record drawing and/or construction certification.
- The Record Drawing shall be prepared by a Registered Professional Engineer or Certified Land Surveyor for the drainage system of the project including any Best Management Practices.
- Construction Certification. Construction of Stormwater Management / BMP facilities which contain impoundments, embankments and related engineered appurtenances including subgrade preparation, compacted soils, structural fills, liners, geosynthetics, filters, seepage controls, cutoffs, toe drains, hydraulic flow control structures, etc. shall be visually observed and monitored by a Registered Professional Engineer or his/her authorized representative. The Engineer must certify that the structure, embankment and associated appurtenances were built in accordance with the approved design plan, specifications and stormwater management plan and standard accepted construction practice and shall submit a written certification and/or drawings to the Environmental Division as required. Soil and compaction test reports, concrete test reports, inspection reports, logs and other required construction material or installation documentation may be required by the Environmental Division to substantiate the certification, if specifically requested. The Engineer shall have the authority and responsibility to make minor changes to the approved plan, in coordination with the assigned County inspector, in order to compensate for unsafe or unusual conditions encountered during construction such as those related to bedrock, soils, groundwater, topography, etc. as long as changes do not adversely affect the integrity of the structure(s). Major changes to the approved design plan or structure must be reviewed and approved by the original design professional and the James City County Environmental Division.
- Record Drawing and Construction Certifications are required within **thirty (30) days** of the completion of Stormwater Management / BMP facility construction. Submittals must be reviewed and accepted by James City County Environmental Division prior to final inspection, acceptance and bond/surety release.

**Dual Purpose Facilities** - Completion of construction also includes an interim stage for Stormwater Management / BMP facilities which serve dual purpose as temporary sediment basins during construction and as permanent stormwater management / BMP facilities following construction, once development and stabilization are substantially complete. For these dual purpose facilities, construction certification is required once the temporary sediment basin phase of construction is complete. Final record drawing and construction certification of additional permanent components is required once permanent facility construction is complete.

*Interim Construction Certification* is required for those dual purpose embankment-type facilities that are generally ten (10) feet or greater in dam height (\*) and may not be converted, modified or begin function as a permanent SWM / BMP structure for a period generally ranging from six (6) to eighteen (18) months or more from issuance of a Land Disturbance permit for construction.

Interim or final record drawing and construction certifications are not required for temporary sediment basins which are designed and constructed in accordance with current minimum standards and specifications for temporary sediment basins per the Virginia Erosion and Sediment Control Handbook (VESCH); have a temporary service life of less than eighteen (18) months; and will be removed completely once associated disturbed areas are stabilized, unless a distinct hazard to the public's health, safety and welfare is determined by the Environmental Division due to the size or presence of the structure or due to evidence of improper construction.

(\*Note: Dam Height as referenced above is generally defined as the vertical distance from the natural bed of the stream or waterway at the downstream toe of the embankment to the top of the embankment structure in accordance with 4VAC50-20-30, Virginia Impoundment Structure Regulations and the Virginia Dam Safety Program.)

- Record Drawings shall provide, at a minimum, all information as shown within these requirements and the attached **RECORD DRAWING CHECKLIST** specific to the type of SWM/BMP facility being constructed. Other additional record data may be formally requested by the James City County Environmental Division. (*Note: Refer to the current edition of the James City County Guidelines for Design and Construction of Stormwater Management BMP's manual for a complete list of acceptable BMP's. Currently there are over 20 acceptable water quality type BMP's accepted by the County.*)
- Record Drawings shall consist of blue/black line prints and a reproducible (mylar, sepia, diazo, etc.) set of the approved stormwater management plan including applicable plan views, profiles, sections, details, maintenance plans, etc. as related to the subject SWM / BMP facility. The set shall indicate "**RECORD DRAWING**" in large text in the lower right hand corner of each sheet with record elevations, dimensions and data drawn in a clearly annotated format and/or boxed beside design values. Approved design plan values, dimensions and data shall not be removed or erased. Drawing sheet revision blocks shall be modified as required to indicate record drawing status. Elevations to the nearest 0.1' are sufficiently accurate except where higher accuracy is needed to show positive drainage. Certification statements as shown in Section 4 of the Record Drawing and Construction Certification Form, *or similar forms thereof*, and professional signatures and seals, with dates matching that of the record drawing status in the revision or title block, are also required on all associated record drawing plans, prints or reproducibles.
- Submission Requirements. Initial and subsequent submissions for review shall consist of a minimum of one (1) blue/black line set for record drawings and one copy of the construction certification documents with appropriate transmittal. Under certain circumstances, it is understood that the record drawing and construction certification submissions may be performed by different professional firms. Therefore, record drawing submission may be in advance of construction certification or vice versa. Upon approval and prior to release of bond/surety, final submission shall include one (1) reproducible set of the record drawings, one (1) blue/black line set of the record drawings and one (1) copy of the construction certification. Also for current and/or future incorporation into the County BMP database and GIS system, it is requested that the record drawings also be submitted to the Environmental Division on a diskette or CD-ROM in an acceptable electronic file format such as \*.dxf, \*.dwg, etc. or in a standard scanned and readable format. The electronic file requirement can be discussed and coordinated with Environmental Division staff at the time of final submission.

**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable    N/A Not Applicable    Inc Incomplete)

**I. Methods and Presentation: (Required for all Stormwater Management / BMP facilities.)**

- XX 1. All constructed facilities meet approved design plans, unless otherwise shown. Record information or deviations from approved design plan shown in clearly annotated format and/or boxed beside design values.
- XX 2. Elevations to the nearest 0.1' unless higher accuracy is needed to show positive drainage.
- XX 3. All plan sheets labeled with "RECORD DRAWING" in large text in lower right hand corner (Approved County Plan Number and BMP ID Code can be included if known).
- XX 4. All plan sheet revision blocks modified to indicate date and record drawing status.
- XX 5. All plan sheets have certification statements and certifying professional's signature and seal.

**II. Minimum Standards: (Required for all Stormwater Management / BMP facilities, as applicable.)**

- XX 1. All requirements of Section I (Methods and Presentation) apply to this section.
- XX 2. Plan Views: Show general location, arrangement and dimensions. Location and alignment shall generally match approved design plans.
- XX 3. Profile or elevations along top or berm of the facility. At a minimum, elevations are required at each end, at intervals not to exceed 50 feet and where low spots may be present. Top of embankment or berm elevations must be no less than design elevation plus any settlement allowances.
- XX 4. Top widths, berm widths and embankment side slopes.
- XX 5. Show length, width and depth of facility or grading, contours or spot elevations as required to verify permanent pool and design storage volumes were met or were reasonably close to the approved design. Evaluation of as-built grading, contours, spot elevations, or cross-sections, may be necessary by the professional to ensure approved design configurations, depths and volumes were closely maintained. If grading or elevations are significantly different from the approved plan, the Environmental Division shall be contacted immediately to determine whether the variation is acceptable or whether further evidence will be required. Facilities which do not closely resemble approved plan grades, elevations or configurations may require regrading by the Contractor; check volumetric computations; and/or a check hydraulic routing to ensure approved design water surface elevations, discharges or freeboard were closely maintained.
- N/A 6. Cross-section of the embankment through the principal spillway or outlet barrel. Must extend at least 100 ft. downstream of the pipe outlet or to recorded site property line, whichever is closer. Proper correlation is required between principal spillway (control structure) crest, emergency spillway crest, orifice and weirs and the top of the dam or facility. All elevations and dimensions must reasonably match the design plan or be sequentially relative to each other and the facility must reflect the required design storage volume(s) and/or design depth.
- N/A 7. Profile or elevations along the entire centerline of the emergency spillway. Emergency spillway may be steeper, but no flatter or narrower than design.
- XX 8. Elevation of the principal spillway crest or outlet crest of the structure.

- XY 9. Primary control structure (riser) diameter or dimensions, height, type of material and base size. Indicate provisions for access that are present such as steps, ladders, etc.
- XY 10. Dimensions, locations and elevations of outlet orifices, weirs, slots and drains.
- INC 11. Type and size of anti-vortex and trash rack device. Height, diameter, dimensions, bar spacings (if applicable) and elevations relative to the principal spillway crest. Indicate if lockable hatch is present or not.
- N/A 12. Type, location, size and number of anti-seep collars or documentation of other methods utilized for seepage control. **May need to obtain this information during construction.**
- N/A 13. Top of impervious core embankment, core trench limits and elevation of cut-off trench bottom. **May need to obtain this information during construction.**
- INC 14. Elevation of the principal spillway barrel (outlet pipe) inlet and outlet invert.
- N/A 15. Outlet barrel diameter, length, slope, type and thickness class of material and type of flared end sections, headwall or endwall.
- N/A 16. Outfall protection dimension, type and depth of rock and if underlain filter fabric is present.
- N/A 17. BMP interior and periphery landscaping zones conform with arrangements and requirements of the approved design plan.
- INC 18. Maintenance plan taken from approved design plan transposed onto record drawing set.
- N/A 19. Fencing location and type, if applicable to facility.
- XY 20. BMP vicinity properly cleaned of stockpiles and construction debris.
- XY 21. No visual signs of erosion or channel degradation immediately downstream of facility.
- INC 22. Any other information formally requested by the Environmental Division specific to the constructed SWM/BMP facility.

**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

( Key for Checklist is as follows: XX Acceptable    N/A Not Applicable    Inc Incomplete )

**III.    Group A - Wet Ponds ( Includes A-1 Small Wet Ponds; A-2 Wet Ponds; A-3 Wet Ext Det Ponds. )**

- N/A A1.    All requirements of Section II, Minimum Standards, apply to Group A facilities.
- A2.    Principal spillway consists of reinforced concrete pipe with O-Ring gaskets for watertight joint construction.
- A3.    Sediment forebays or pretreatment devices provided at inlets to pond. Generally 4 to 6 ft. deep.
- A4.    Access for maintenance and equipment is provided to the forebay(s). Access corridors are at least 12 ft. wide, have a maximum slope of 15 percent and are adequately stabilized to withstand heavy equipment or vehicle use.
- A5.    Adequate fixed vertical sediment depth markers installed in the forebay(s) for future sediment monitoring purposes.
- A6.    Pond liner (if required) provided. Either clay liners, polyliners, bentonite liners or use of chemical soil additives based on requirements of the approved plan.
- A7.    Minimum 6 percent slope safety bench extending a minimum of 15 feet outward from normal pool edge and/or an aquatic bench extending a minimum of 10 feet inward from the normal shoreline with a maximum depth of 12 inches below the normal pool elevation, if applicable, per the approved design plans. (Note: Safety benches may be waived if pond side slopes are no steeper than 4H:1V).
- A8.    No trees are present within a zone 15 feet around the embankment toe and 25 feet from the principal spillway structure.
- A9.    Wet permanent pool, typically 3 to 6 feet deep, is provided and maintains level within facility.
- A10.    Low flow orifice has a non-clogging mechanism.
- A11.    A pond drain pipe with valve was provided.
- A12.    Pond side slopes are not steeper than 3H:1V, unless approved plan allowed for steeper slope.
- N/A A13.    End walls above barrels (outlet pipe) greater than 48 inch in diameter are fenced to prevent a fall hazard.

**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

( Key for Checklist is as follows: XX Acceptable    N/A Not Applicable    Inc Incomplete )

**IV.    Group B - Wetlands    ( Includes B-1 Shallow Marsh; B-2 Ext Det Shallow Wetlands; B-3 Pond Wetland System and B-4 Pocket Wetland )**

- |            |   |
|------------|---|
| <u>N/A</u> | B1.    Same requirements as Group A Wet Ponds.  |
|            | B2.    Minimum 2:1 length to width flow path provided across the facility.  |
|            | B3.    Micropool provided at or around outlet from BMP (generally 3 to 6 ft. deep).   |
|            | B4.    Wetland type landscaping provided in accordance with approved plan. Includes correct pondscaping zones, plant species, planting arrangements, wetland beds, etc. Wetland plants include 5 to 7 emergent wetland species. Individual plants at 18 inches on center in clumps. |
|            | B5.    Adequate wetland buffer provided (Typically 25 ft. outward from maximum design water surface elevation and 15 ft. setback to structures).  |
|            | B6.    No more than one-half (1/2) of the wetland surface area is planted.  |
|            | B7.    Topsoil or wetland mulch provided to support vigorous growth of wetland plants.  |
| <u>N/A</u> | B8.    Planting zones staked or flagged in field and locations subsequently established by appropriate field surveying methods for record drawing presentation.   |

**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

( Key for Checklist is as follows: **XX** Acceptable    **N/A** Not Applicable    **Inc** Incomplete )

**V.    Group C - Infiltration Practices**                      ( Includes C-1 Infiltration Trench; C-2 Infiltration Trench;  
C-3 Infiltration Basin; and C-4 Infiltration Basin )

- |            |      |  |
|------------|------|--|
| <u>N/A</u> | C1.  | All requirements of Section II, Minimum Standards, apply to Group C facilities as applicable.  |
|            | C2.  | Facility is not located on fill slopes or on natural ground in excess of six (6) percent.  |
|            | C3.  | Pretreatment devices provided prior to entry into the infiltration facility. Acceptable pretreatment devices include sediment forebays, sediment basins, sediment traps, sump pits or inlets, grass channels, plunge pools or other acceptable measures. |
|            | C4.  | Three (3) or more of the following pretreatment devices provided to protect long term integrity of structure: grass channel; grass filter strip; bottom sand layer; upper filter fabric layer; use of washed bank run gravel aggregate.                  |
|            | C5.  | Sides of infiltration practice lined with filter fabric.   |
|            | C6.  | Facility was not used for erosion and sediment control purposes and sediment was prevented from entering the facility to the greatest extent possible during construction.   |
|            | C7.  | Stabilization and acceptable vegetative cover established over contributing drainage area prior to conveyance of stormwater to the facility.   |
|            | C8.  | Minimum one hundred (100) foot separation horizontally from any known water supply well and minimum one hundred (100) foot separation upslope from any building.   |
|            | C9.  | Minimum twenty-five (25) foot separation down gradient from any structure.   |
|            | C10. | Stormwater outfalls provided for overflow associated with larger design storms.  |
|            | C11. | No visual signs of erosion or channel degradation immediately downstream of facility.  |
|            | C12. | Facility does not currently cause any apparent surface or subsurface water problems to downgrade properties.   |
|            | C13. | Observation well provided.   |
| <u>N/A</u> | C14. | Adequate, direct access provided to the facility for future maintenance, operation and inspection.   |

**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

( Key for Checklist is as follows: XX Acceptable    N/A Not Applicable    Inc Incomplete )

**VI.    Group D - Filtering Systems    ( Includes D-1 Bioretention Cells; D-2 Surface Sand Filters; D-3 Underground Sand Filters; D-4 Perimeter Sand Filters; D-5 Organic Filters; and D-6 Pocket Sand Filters )**

- N/A D1.    All requirements of Section II, Minimum Standards, apply to Group D facilities.
- D2.    Sediment pretreatment devices provided.
- D3.    For D-1 BMPs (Bioretention Cells), pretreatment consisting of a grass filter strip below level spreader (deflector); a gravel diaphragm; and mulch and planting soil layers were provided.
- D4.    For D-1 BMPs (Bioretention Cells), plantings consist of native plant species; vegetation provided was based on zones of hydric tolerances; trees and understory of shrubs and herbaceous materials were provided; woody vegetation is absent from inflow locations; and trees are located around facility perimeter.
- D5.    Facility was not used for erosion and sediment control purposes and sediment was prevented from entering the facility to the greatest extent possible during construction.
- D6.    No visible signs of accumulated silt/sediment were present in the facility following construction or alternately, accumulated silt/sediment was properly removed .
- D7.    Filtering system is off-line from storm drainage conveyance system.
- D8.    Overflow outlet has adequate erosion protection.
- D9.    Deflector, diversion, flow splitter or regulator structure provided to divert the water quality volume to the filtering structure.
- D10.    Minimum four (4) inch perforated underdrain provided in a clean aggregate envelope layer beneath the facility.
- D11.    Minimum fifty (50) foot separation from any slope fifteen (15) percent or greater. Minimum one hundred (100) foot separation horizontally from any known water supply well. Minimum one hundred (100) foot separation upslope and twenty-five (25) foot separation downslope from any building.
- D12.    Stabilization and acceptable vegetative cover established over contributing drainage area prior to conveyance of stormwater to the facility.
- D13.    No visual signs of erosion or channel degradation immediately downstream of facility.
- N/A D14.    Adequate, direct access provided to the pretreatment area and/or filter bed for future maintenance.

**STORMWATER MANAGEMENT / BMP FACILITIES  
AS-BUILT PLAN CHECKLIST**

( Key for Checklist is as follows: XX Acceptable    N/A Not Applicable    Inc Incomplete )

**VII.    Group E - Open Channel Systems    ( Includes E-1 Wet Swales (Check Dams); E-2 Dry Swales; and E-3 Biofilters )**

- N/A E1.    All requirements of Section II, Minimum Standards, apply to Group E facilities as applicable.
- E2.    Open channel system has constructed longitudinal slope of less than four (4) percent.
- E3.    No visual signs of erosion in the open channel system's soil and/or vegetative cover.
- E4.    Open channel side slopes are no steeper than 2H:1V at any location. Preferred channel sideslope is 3H:1V or flatter.
- E5.    No visual signs of ponding are present at any location in the open channel system, except at rock check dam locations for E-1 systems (Wet Swales).
- E6.    For E-2 BMPs (Dry Swales), an underdrain system was provided.
- E7.    Treated timber or rock check dams provided as pretreatment devices for the open channel system.
- E8.    Gravel diaphragm provided in areas where lateral sheet flow from impervious surfaces are directly connected to the open channel system.
- E9.    Grass cover/stabilization in the open channel system appears adaptable to the specific soils and hydric conditions for the site and along the channel system.
- E10.    Open channel system areas with grass covers higher than four (4) to six (6) inches were properly mowed.
- E11.    Facility was not used for erosion and sediment control purposes and sediment was prevented from entering the facility to the greatest extent possible during construction.
- E12.    No visible signs of accumulated silt/sediment were present in the facility following construction or alternately, accumulated silt/sediment was properly removed and no adverse affects to the function of the facility are anticipated.
- E13.    For E-3 BMPs (Biofilters), the bottom width is six (6) feet maximum at any location.
- E14.    For E-3 BMPs (Biofilters), sideslopes are 3H:1V maximum at any location.
- E15.    For E-3 BMPs (Biofilters), the constructed channel slope is less than or equal to three (3) percent at any location.
- N/A E16.    For E-3 BMPs (Biofilters), the constructed grass channel is approximately equivalent to the constructed roadway length.

**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

( Key for Checklist is as follows: XX Acceptable    N/A Not Applicable    INC Incomplete )

**VIII. Group F - Extended Dry Detention**    ( Includes F-1 Timber Walls; and F-2 Dry Extended Detention with Forebay )

- INC F1. All requirements of Section II, Minimum Standards, apply to Group F facilities.
- XY F2. Basin bottom has positive slope and drainage from all basin inflow points to the riser (or outflow) location.
- XY F3. Timber wall BMP used in intermittent stream only. (ie. Prohibited in perennial streams.)
- N/A F4. Forebay provided approximately 20 ft. upstream of the facility. Forebays generally 4 to 6 feet in depth.
- N/A F5. A reverse slope pipe, vertical stand pipe or mini-barrel and riser was provided to prevent clogging.
- N/A F6. Principal spillway and outlet barrel provided consisting of reinforced concrete pipe with O-Ring gaskets for watertight joint construction.
- N/A F7. Mini-barrel and riser, if used, contains a removable trash rack to reduce clogging.
- XY F8. Low flow orifice, if used, has a minimum diameter of three (3) inches or two (2) inches if internal orifice control was utilized and a small, cage type external trash rack.
- INC F9. Timbers properly reinforced or concrete footing provided if soil conditions were prohibitive.
- INC F10. Timber wall cross members extended to a minimum depth of two (2) feet below ground elevation.
- INC F11. Protection against erosion and scour from the low flow orifice and weir-flow trajectory provided.
- N/A F12. Stilling basin or standard outlet protection provided at principal spillway outlet.
- INC F13. Adequate, direct access provided to the facility. Access corridor to facility is at least ten (10) feet wide, slope is less than twenty (20) percent and appropriate stabilization provided for equipment and vehicle use. Access extends to forebay, standpipe and timber wall, as applicable.
- XY F14. No visual signs of undercutting of timber walls or clogging of the low orifice were present.
- XY F15. No visual signs of erosion or channel degradation immediately downstream of facility.
- XY F16. No visible signs of accumulated silt/sediment were present in the facility following construction or alternately, accumulated silt/sediment was properly removed and no adverse affects to the function of the facility are anticipated.

**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

( Key for Checklist is as follows: **XX** Acceptable    **N/A** Not Applicable    **Inc** Incomplete )

**IX.    Group G - Open Spaces**        ( Includes All Open Space Types G-1; G-2; and G-3 )

- |            |     |   |
|------------|-----|---|
| <u>N/A</u> | G1. | All requirements of Section II, Minimum Standards, apply to Group G facilities as applicable.   |
|            | G2. | Constructed impervious areas appear to conform with locations indicated on the approved plan and appear less than sixty (60) percent impervious in accordance with the requirements of the James City County Chesapeake Bay Preservation Ordinance. |
|            | G3. | Dedicated open space areas are in undisturbed common areas, conservation easements or are protected by other enforceable instruments that ensures perpetual protection.   |
|            | G4. | Provisions included to clearly specify how the natural vegetated areas utilized as dedicated open space will be managed and field identified (marked).  |
|            | G5. | Adequate protection measures were implemented during construction to protect the defined dedicated open space areas.  |
| <u>N/A</u> | G6. | Dedicated open space areas were not disturbed during construction (ie. cleared, grubbed or graded).   |

**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

( Key for Checklist is as follows: **XX** Acceptable    **N/A** Not Applicable    **Inc** Incomplete )

**X.    Storm Drainage Systems (Associated with BMP's Only)**

*( Includes all incidental stormwater drainage conveyance systems associated with SWM/BMP facilities such as onsite or offsite storm drains, open channels, inlets, manholes, junctions, outlet protections, deflectors, etc. These facilities are external to the treatment function of, but are directly associated with drainage to and/or from a constructed SWM/BMP facility. The intent of this portion of the certification is to accurately identify the type and quantity of inflow or outflow points associated with the facility for future reference. The Professional may use his/her own discretion to determine inclusive facilities to meet the intent of this section. As a general rule, storm drainage systems would include incidental facilities to the nearest access structure upslope or downslope from the normal physical limits of the facility or 800 feet of storm drainage conveyance system length, whichever is less. )*

- N/A SD1.    All requirements of Section II, Minimum Standards, apply to Storm Drainage Systems.
- SD2.    Horizontal location of all pipe and structures relative to the SWM/BMP facility.
- SD3.    Type, top elevation and invert elevation of all access type structures (inlets, manholes, etc.).
- SD4.    Material type, size or diameter, class, invert elevations, lengths and slopes for all pipe segments.
- N/A SD5.    Class, length, width and depth of riprap and outlet protections or dimensions of special energy dissipation structures.

**XII.    Other Systems**

*( Includes any non-typical, specialty, manufactured or innovative stormwater management/BMP practices or systems generally accepted for use as or in conjunction with other acceptable stormwater management / BMP practices. Requires evidence of prior satisfactory industry use and prior Environmental Division approval, waiver or exception .)*

- N/A O1.    All requirements of Section II, Minimum Standards, apply to this section.
- N/A O2.    Certification criteria to be determined on a case-by-case basis by the Environmental Division specific to the proposed SWM/BMP facility.

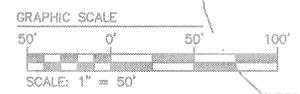
**STORMWATER MANAGEMENT / BMP FACILITIES  
RECORD DRAWING CHECKLIST**

**XIII. References**

*( The James City County Record Drawing and Construction Certification Forms and Checklists for Stormwater Management / BMP facilities were developed using the following sources and references. )*

- Baltimore County, Maryland Soil Conservation District, As-Built Stormwater Management Pond Checklist.
- James City County, Virginia, Guidelines for Design and Construction of Stormwater Management BMP's (October 1999).
- James City County, Virginia, Stormwater Detention/Retention Basin Design Checklist and Erosion and Sediment Control and Stormwater Management Design Plan Checklists.
- James City County Stormwater Policy Framework, Final Report of the James City County BMP Policy Project, October 1998, The Center for Watershed Protection.
- Prince Georges County, Maryland, As-Built Requirements Retention or Detention Pond/Basin.
- Prince William County, Virginia, Stormwater Management Fact Sheet.
- Stafford County, Virginia, As-Built Plan Checklist.
- Stormwater Management Design Manual, NRCS Maryland Code No. 378, Pond Standards and Specifications.
- USEPA/Watershed Management Institute, Stormwater Management Inspection Forms.
- Virginia Impounding Structure Regulations (Dam Safety), Department of Conservation & Recreation, 1997.
- Virginia Erosion and Sediment Control Handbook, Third Edition 1992, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation.
- Virginia Stormwater Management Handbook, 1999 edition, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation.





RECORD DRAWING CERTIFICATION:  
 I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF  
 THAT THIS RECORD DRAWING REPRESENTS THE ACTUAL CONDITION  
 OF THE STORMWATER MANAGEMENT / BMP FACILITY. THE FACILITY  
 APPEARS TO CONFORM WITH THE PROVISIONS OF THE APPROVED  
 DESIGN PLAN, SPECIFICATIONS, AND STORMWATER MANAGEMENT  
 PLAN, EXCEPT AS NOTED.

*V. M. B.* PE. *6/1/95*  
 SIGNATURE DATE

**RECORD DRAWING BASED ON INFORMATION  
 AS SUPPLIED BY AES ENGINEERING**

|     |       |  |
|-----|-------|--|
| NO. | DATE  | REVISION / COMMENT / NOTE              |
| 1   | 8/95  | GENERAL REVISIONS                      |
| 2   | 10/96 | REVISIONS TO LOT LAYOUTS AS PER CLIENT |
| 3   | 2/97  | OWNER/DEVELOPER CHANGE (SEWER & ROAD)  |
| 4   | 12/00 | RECORD DRAWINGS                        |

5248 Old Towne Road, Suite 1  
 Williamsburg, Virginia 23188  
 (804) 253-0040  
 Fax (804) 220-8994

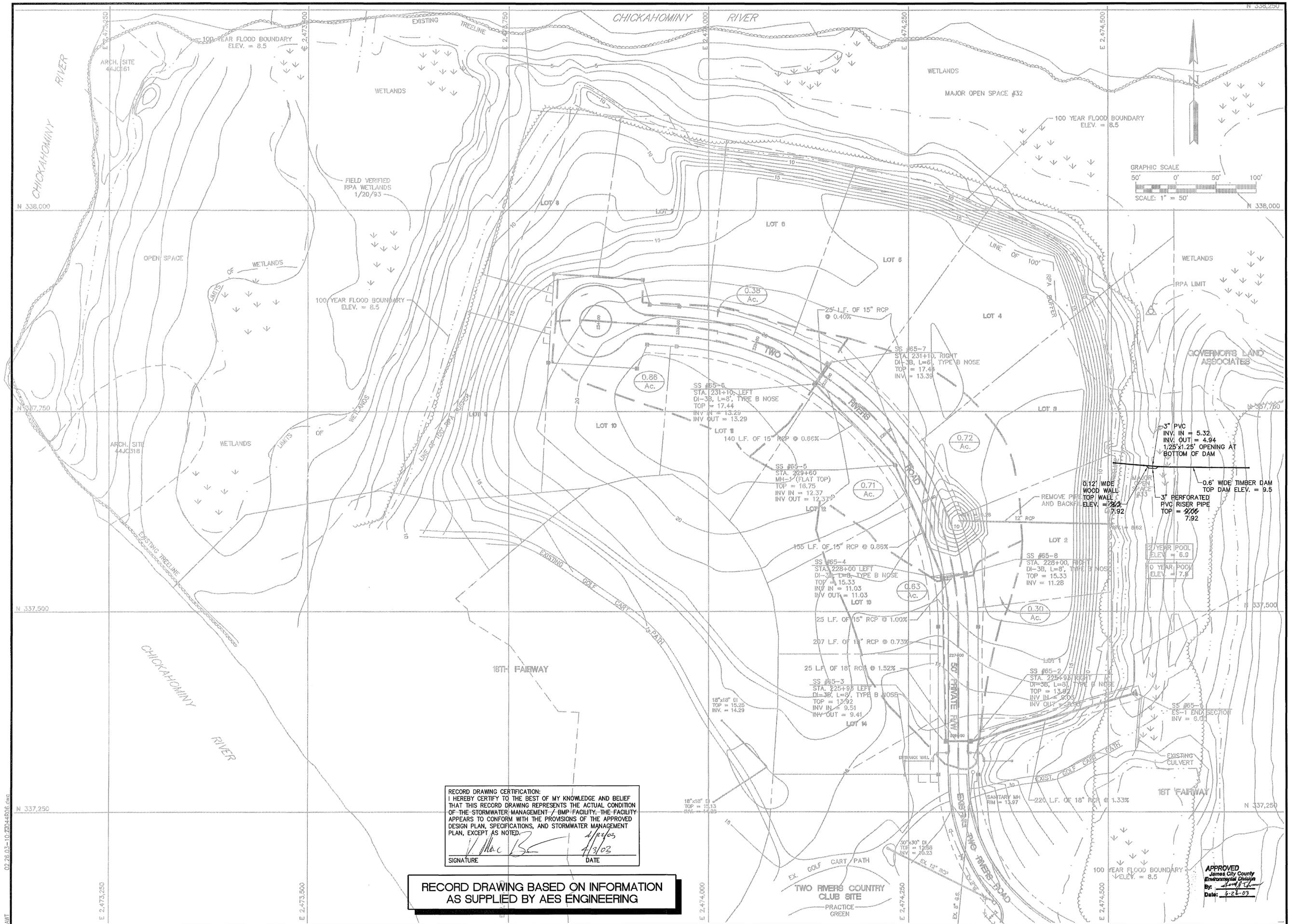


**STORM SEWER PLAN**  
 BAY 4, POD 4  
 THE  
**GOVERNOR'S LAND**  
 At Two Rivers  
 JAMES CITY COUNTY  
 POWHATAN DISTRICT

**SUT REVIEW SET JR 0361 S-52-95**

|             |        |
|-------------|--------|
| Designed    | Drawn  |
| VMB         | EAW    |
| Scale       | Date   |
| 1"=50'      | 6/1/95 |
| Project No. |        |
| 7173        |        |
| Drawing No. |        |
| 6           |        |

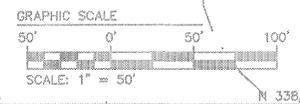




RECORD DRAWING CERTIFICATION:  
 I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF  
 THAT THIS RECORD DRAWING REPRESENTS THE ACTUAL CONDITION  
 OF THE STORMWATER MANAGEMENT / BMP FACILITY. THE FACILITY  
 APPEARS TO CONFORM WITH THE PROVISIONS OF THE APPROVED  
 DESIGN PLAN, SPECIFICATIONS, AND STORMWATER MANAGEMENT  
 PLAN, EXCEPT AS NOTED.

*[Signature]* 1/22/03  
 DATE 1/3/03

**RECORD DRAWING BASED ON INFORMATION  
 AS SUPPLIED BY AES ENGINEERING**



APPROVED  
 James City County  
 Environmental Division  
 By: *[Signature]*  
 Date: 6-28-03

| No. | DATE  | REVISION / COMMENT / NOTE                 |
|-----|-------|---|
| 5   | 3/03  | REVISIONS AS PER JAMES CITY COUNTY REVIEW |
| 4   | 12/00 | RECORD DRAWINGS                           |
| 3   | 2/97  | OWNER DEVELOPER CHANGE (SEWER & ROAD)     |
| 2   | 10/96 | REVISIONS TO LOT LAYOUTS AS PER CLIENT    |
| 1   | 8/95  | GENERAL REVISIONS                         |

5248 Old Towne Road, Suite 1  
 Williamsburg, Virginia 23188  
 (804) 253-0040  
 Fax (804) 220-8994



STORM SEWER PLAN  
 BAY 4, POD 4  
 THE  
 GOVERNOR'S LAND  
*at Two Rivers*

|                     |                |
|---------------------|----------------|
| Designed<br>VMB     | Drawn<br>EAW   |
| Scale<br>1"=50'     | Date<br>6/1/95 |
| Project No.<br>7173 |                |
| Drawing No.<br>6    |                |



James City County, Virginia  
Environmental Division

Stormwater Management/BMP  
Record Drawing Review Form

County Plan No. 5-52-95  
 Project Name: Gov's Land - Two Rivers Point  
 Stormwater Management Facility: JR-036 - Timber Crib Wall

| Component  | Approved Plan | Record Drawing | OK   |
|--|---------------|----------------|------|
| <del>Top of dam (lowest point)</del>                 |               |                |      |
| Top of Dam (reported)                                | 8.00          | 9.50           |      |
| <del>Top width of dam</del><br>DRY STORAGE 1/2"      | 8.00          | 9.06           | 1/2" |
| <del>Crest of riser</del><br>WET STORAGE             | 6.50          | 9.30           |      |
| <del>Crest of Emerg. Spillway</del>                  | —             | —              |      |
| <del>Low Water elevation</del><br>PVC RIVER INV. OUT | 5.32          | 4.70           |      |
| <del>Normal Water level</del><br>WALL OPENING INVERT | 4.30          | 4.94           |      |
| Bottom of pond elevation                             |               |                |      |
| Inflow Pipe size (1)                                 |               |                |      |
| Inflow Pipe size (2)                                 |               |                |      |
| Inflow Pipe size (3)                                 |               |                |      |
| Barrel Diameter (inches)                             |               |                |      |
| 100 yr Storm Elevation                               |               |                |      |
| Traffic rack/anti-vortex type                        |               |                |      |
| Forbay, baffle wall, etc.                            |               |                |      |
| Pond drain elevation                                 |               |                |      |

Date: 1/13/03  
 Name: R. Hall

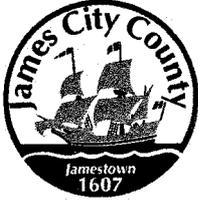
$$2\text{-year WSEL} = 6.9$$

$$10\text{-year WSEL} = 7.8$$

$$\text{TOP WALL} = 8.0$$

$$\begin{aligned} \underline{OA} \quad & 0.3 + 0.3 + 0.8 + 0.63 + \\ & 0.72 + 0.74 + 0.28 = 3.77 \text{ AC.} \end{aligned}$$

$$630 \text{ CT } 9.7 \text{ AC.}$$



## DEVELOPMENT MANAGEMENT

101-E MOUNTS BAY ROAD, P.O. BOX 8784, WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6671 Fax: (757) 253-6850 E-MAIL: devtman@james-city.va.us

CODE COMPLIANCE  
(757) 253-6626  
codecomp@james-city.va.us

ENVIRONMENTAL DIVISION  
(757) 253-6670  
environ@james-city.va.us

PLANNING  
(757) 253-6685  
planning@james-city.va.us

COUNTY ENGINEER  
(757) 253-6678  
INTEGRATED PEST MANAGEMENT  
(757) 253-2620

January 24, 2003

Mr. James H. Bennett  
Governors Land Associates  
9701 Mill Pond Run  
Toano, Va. 23168

Re: Governor's Land - Two Rivers Point  
County Plan No. S-52-95  
Stormwater Management Facility  
County BMP ID Code: JR 036

Dear Mr. Bennett:

The Environmental Division has reviewed a record drawing as submitted to our office for the above referenced BMP. The record drawing provides as-built information for a timber crib wall installed east of Lots 2 and 3 in Two Rivers Point.

Based on our review of the project and a concurrent field inspection as performed on January 14<sup>th</sup> 2003, the following items must be addressed prior to release of the developer's surety instrument for the stormwater management/BMP facility at the site and to proceed with closing out the project:

### **Construction Certification:**

1. In accordance with the Note 18 on Sheet 7 of the approved plan, construction certification for the stormwater management/BMP facility is required. None was provided. The certification can be in letter format or by use of the certification statements in Section 4 of the *James City County, Stormwater Management/BMP Facilities, Record Drawing and Construction Certification, Standard Forms & Instructions*.

### **Record Drawing:**

2. The record drawing set dated November 2<sup>nd</sup> 2001 is **satisfactory**. Please forward one reproducible and one blue/black line set of the record drawings to our office.

### **Construction - Related Items:**

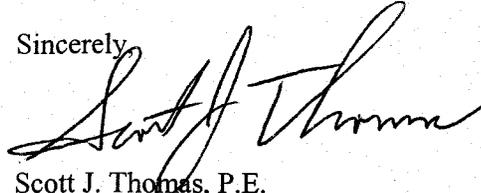
3. Clean and remove all debris and organic material from within the area between the main timber wall and the stringer structure (ie. upstream side of the square opening in the wall.) Debris shall not obstruct flow out of the BMP

4. Properly convert the BMP from function as a temporary sediment trapping measure and put into service as a permanent extended detention BMP. This includes ensuring all stringers are installed, the 3-inch riser is arranged, anchored and perforated properly and the offset wall is lowered to design elevation (El. 6.5) per the approved plan specifications.

Once this work is satisfactorily completed, contact our office appropriately for reinspection. We can then proceed with final release of the surety and/or closing out the project. One reproducible and one blue/black line set of the record drawings will be required once the above items are adequately addressed.

Please contact me at 757-253-6639 or the assigned Environmental Division inspector, Joe Buchite at 757-253-6643 if you have any further comments or questions.

Sincerely,



Scott J. Thomas, P.E.  
Civil Engineer  
Environmental Division

cc: Marc Bennett, AES - via fax

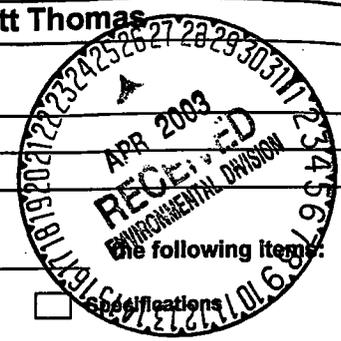
G:\AsBuilts\S5295.jr036

**AES CONSULTING ENGINEERS**

Engineering, Surveying and Planning  
 5248 Olde Towne Road, Suite 1  
 Williamsburg, Virginia 23188  
 Phone: (757) 253-0040  
 Fax: (757) 220-8994

**LETTER OF TRANSMITTAL**

|                         |                 |
|-------------------------|-----------------|
| DATE: 23-Apr-03         | JOB NO. 7173-09 |
| ATTENTION: Scott Thomas |                 |
| RE : Governor's Land    |                 |
|                         |                 |
|                         |                 |



TO : James City County  
 Environmental Division  
 101 Mounts Bay Road  
 Williamsburg, VA 23187

WE ARE SENDING YOU:  Attached  Under separate cover via \_\_\_\_\_

Shop drawings  Prints  Plans  Samples  Specifications

Copy of letter  Change order  Other Construction Certification

| COPIES | DATE    | NO. | DESCRIPTION   |
|--------|---------|-----|---|
| 1      | 4-23-03 |     | As-Built drawing (Mylar) - Wingfield Lake JR017                         |
| 1      | 4-23-03 |     | As-Built drawing (Black line) - Wingfield Lake JR017                    |
| 1      | 4-23-03 |     | Memo responding to letter from County - Wingfield Lake JR017            |
| 1      | 4-23-03 |     | As-Built drawing (Mylar) - Cypress Isle JR041                           |
| 1      | 4-23-03 |     | As-Built drawing (Black line) - Cypress Isle JR041                      |
| 1      | 4-23-03 |     | Memo responding to letter from County - Cypress Isle JR041              |
| 1      | 4-23-03 |     | Routing computations using As-Built information JR041                   |
| 1      | 4-23-03 |     | As-Built drawing (Mylar) - Barrett's Point Pond JR042                   |
| 1      | 4-23-03 |     | As-Built drawing (Black line) - Barrett's Point Pond JR042              |
| 1      | 4-23-03 |     | Memo responding to letter from County - Barrett's Point Pond JR042      |
| 1      | 4-23-03 |     | As-Built drawing (Mylar) - Wythe-Hamlet Dry Pond JR040                  |
| 1      | 4-23-03 |     | As-Built drawing (Black line) - Wythe-Hamlet Dry Pond JR040             |
| 1      | 4-23-03 |     | Memo responding to letter from County - Wythe-Hamlet Dry Pond JR040     |
| 1      | 4-23-03 |     | As-Built drawing (Mylar) - Travis Pond Dry Pond #2                      |
| 1      | 4-23-03 |     | As-Built drawing (Black line) - Travis Pond Dry Pond #2                 |
| 1      | 4-23-03 |     | Memo responding to letter from County - Travis Pond Dry Pond #2         |
| 1      | 4-23-03 |     | As-Built drawing (Mylar) - Two Rivers Point Timber Structure JR036      |
| 1      | 4-23-03 |     | As-Built drawing (Black line) - Two Rivers Point Timber Structure JR036 |
| 1      | 4-23-03 |     | Memo responding to letter from County - Two Rivers Point Timber JR036   |
| 1      | 4-23-03 |     | As-Built drawing (Mylar) - Wingfield Lake Timber Structure JR031        |
| 1      | 4-23-03 |     | As-Built drawing (Black line) - Wingfield Lake Timber Structure JR031   |
| 1      | 4-23-03 |     | Memo responding to letter from County - Wingfield Lake Timber JR031     |

THESE ARE TRANSMITTED as checked below:

For Approval  Approved as submitted  Resubmit \_\_\_\_\_ copies for approval

For your use  Approved as noted  Submit \_\_\_\_\_ copies for distribution

As requested  Returned for corrections  Return \_\_\_\_\_ Corrected prints

For review and comment  For Signature

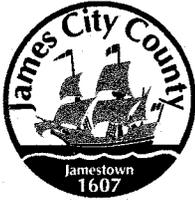
FOR BIDS DUE \_\_\_\_\_  PRINTS RETURNED AFTER LOAN TO US

REMARKS:

If you have any questions please contact me. Thank you.

COPIES TO: file

SIGNED: Victoria Bains  
 Victoria Bains



# DEVELOPMENT MANAGEMENT

101-E MOUNTS BAY ROAD, P.O. BOX 8784, WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6671 Fax: (757) 253-6850 E-MAIL: devtman@james-city.va.us

CODE COMPLIANCE  
(757) 253-6626  
codecomp@james-city.va.us

ENVIRONMENTAL DIVISION  
(757) 253-6670  
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(757) 253-6685  
planning@james-city.va.us

COUNTY ENGINEER  
(757) 253-6678  
INTEGRATED PEST MANAGEMENT  
(757) 253-2620

January 24, 2003

Mr. James H. Bennett  
Governors Land Associates  
9701 Mill Pond Run  
Toano, Va. 23168

*Reinspect  
6-2-03*

Re: Governor's Land - Two Rivers Point  
County Plan No. S-52-95  
Stormwater Management Facility  
County BMP ID Code: JR 036

Dear Mr. Bennett:

The Environmental Division has reviewed a record drawing as submitted to our office for the above referenced BMP. The record drawing provides as-built information for a timber crib wall installed east of Lots 2 and 3 in Two Rivers Point.

Based on our review of the project and a concurrent field inspection as performed on January 14<sup>th</sup> 2003, the following items must be addressed prior to release of the developer's surety instrument for the stormwater management/BMP facility at the site and to proceed with closing out the project:

**Construction Certification:**

*OK  
ECE/nc  
3/28/03*

1. In accordance with the Note 18 on Sheet 7 of the approved plan, construction certification for the stormwater management/BMP facility is required. None was provided. The certification can be in letter format or by use of the certification statements in Section 4 of the *James City County, Stormwater Management/BMP Facilities, Record Drawing and Construction Certification, Standard Forms & Instructions.*

**Record Drawing:**

*OK  
4/29/03*

The record drawing set dated November 2<sup>nd</sup> 2001 is **satisfactory**. Please forward one reproducible and one blue/black line set of the record drawings to our office.

**Construction - Related Items:**

*OK  
6-2-03*

3. Clean and remove all debris and organic material from within the area between the main timber wall and the stringer structure (ie. upstream side of the square opening in the wall.) Debris shall not obstruct flow out of the BMP

**POOR  
QUALITY**

**ORIGINAL(S)  
FOLLOW**

**THIS IS THE BEST  
COPY AVAILABLE**

**VCE DOCUMENT CONVERSION**

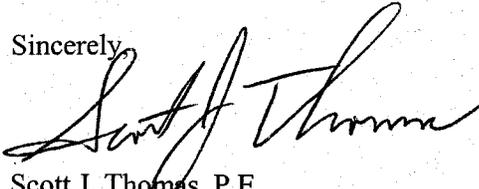
✓ 4.  
OK  
6-2-07

Properly convert the BMP from function as a temporary sediment trapping measure and put into service as a permanent extended detention BMP. This includes ensuring all stringers are installed, the 3-inch riser is arranged, anchored and perforated properly and the offset wall is lowered to design elevation (El. 6.5) per the approved plan specifications.

Once this work is satisfactorily completed, contact our office appropriately for reinspection. We can then proceed with final release of the surety and/or closing out the project. One reproducible and one blue/black line set of the record drawings will be required once the above items are adequately addressed.

Please contact me at 757-253-6639 or the assigned Environmental Division inspector, Joe Buchite at 757-253-6643 if you have any further comments or questions.

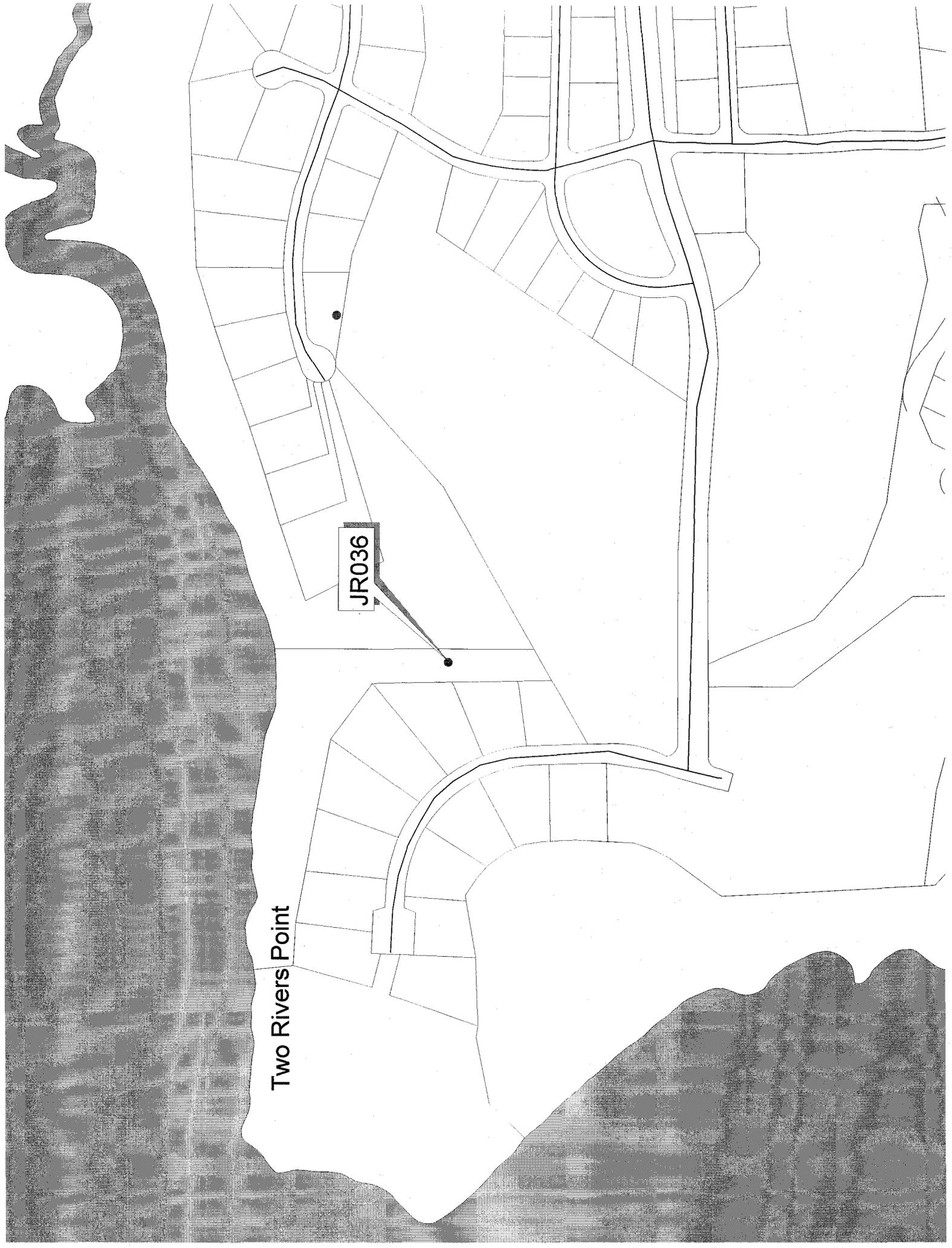
Sincerely,



Scott J. Thomas, P.E.  
Civil Engineer  
Environmental Division

cc: Marc Bennett, AES - via fax

G:\AsBuilts\5295.jr036



JR036

Two Rivers Point

**Record Drawing/Construction Certification Submittal for a BMP Facility**

Date:

12/17/01

✓ JB

Inspector:

- Pat Menichino
- Gerry Lewis
- Beth Davis
- Mike Woolson
- Joe Buchite
- Other: \_\_\_\_\_

Project:

Governors LAND - Two Rivers Point

BMP Facility:

Timber Crib (East of Lot 2, 1210 Two Rivers Road)

Plan No.

S-52-95

BMP ID Code:

JR 036

I have received a transmittal for a  Record Drawing and  Construction Certification for the above referenced facility on 11/07/01. Prior to full engineering review of these items and a field inspection, I am first forwarding the items to you to cursory review in case any major field changes were performed that I should be aware of and/or to ensure the record drawing accurately portrays what you saw in the field. Please review the drawing and return to me promptly so I can proceed with the review for certification purposes.

During my review, I will look at issues related to the BMP and its primary inflow and outflow conveyance systems, and will make comment in the following areas: Record Drawing (RD), Construction Certification (CC) and Construction-Related (CR) punch list items. If you have any other related non-BMP site issues such as erosion, stabilization, removal of erosion & sediment controls, etc. that are not related to the BMP, I can easily add these items to any comment letter that I may forward to the Owner/Engineer. Let me know if any outstanding site issues remain.

If I don't hear from you I will ask you if any other outstanding issues remain before I forward any letters to the Owner/Engineer.

Scott

SWMProg\BMP\ConInsp\Insp.trans

EFS Bond \$1,000?

WATERSHED

JR

MAINTENANCE PLAN

No

CTRL STRUC DESC

Square Orific

BMP ID NO

036

SITE AREA acre

18.89

CTRL STRUC SIZE inches

13

PLAN NO

S-52-95

LAND USE

Resid Planned Co

OTLT BARRL DESC

Perf PVC

TAX PARCEL

(43-01)(05-1A)

old BMP TYP

Timber Crib

OTLT BARRL SIZE inch

3

PIN NO

4310500001A

JCC BMP CODE

CONSTRUCTION DATE

3/1/1997

POINT VALUE

6

EMERG SPILLWAY

No

PROJECT NAME

Governors Land-Two Rivers Point

DESIGN HW ELEV

10.0

FACILITY LOCATION

East of 1210 Two Rivers Road

PERM POOL ELE

na

CITY-STATE

Williamsburg, Va. 23185

SVC DRAIN AREA acres

8.4

2-YR OUTFLOW cfs

CURRENT OWNER

Governors Land Foundation

10-YR OUTFLOW cfs

OWNER ADDRESS

2700 Two Rivers Road

REC DRAWING

Yes

OWNER ADDRESS 2

SERVICE AREA DESCRI

SF Lots, roads & wooded area

CITY-STATE-ZIP CODE

Williamsburg, Va. 23185

IMPERV AREA acres

CONSTR CERTI

No

OWNER PHONE

RECV STREAM

UT of James River

MAINT AGREEMENT

Yes

EXT DET-WQ-CTRL

Yes

LAST INSP DATE

10/24/2001

EMERG ACTION PLAN

No

WTR QUAL VOL acre-ft

0.6

INTERNAL RATING

4

CHAN PROT CTRL

No

MISC/COMMENTS

CHAN PROT VOL acre-ft

0

Bay 4 Pod 4. Top Wall El. 9.5. 10-yr pool El. 7.8.

SW/FLOOD CONTROL

Yes

GEOTECH REPORT

No

Get Last BMP No

Return to Menu

# Memorandum

**DATE:** April 23, 2003  
**TO:** Scott Thomas  
**FROM:** Victoria Bains  
**SUBJECT:** Two Rivers Point Timber Structure, County BMP ID Code: JR036

---

In response to your letter dated January 24, 2003 AES Consulting Engineers has taken several actions.

**Construction Certification:**

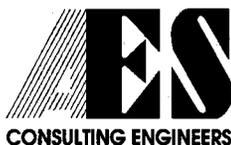
Being provided by Earthworks Consulting Engineers, Inc.

**Record Drawings:**

Added new elevation for offset timber wall after it was lowered. The offset wall's elevation is 7.92 feet, which is 1.58 feet below main timber wall. Original design has the offset wall 1.5 feet below main timber wall.

**Construction – Related Items:**

Organic material and debris was cleared for approximately 30 feet out from the timber wall on both the upstream and downstream sides. Offset wall and 3-inch riser were lower to permanent BMP facility approved design. Stone on upstream side was replaced.



5248 Olde Towne Road • Suite 1 • Williamsburg, Virginia 23188  
(757) 253-0040 • Fax (757) 220-8994 • E-mail [aes@aesva.com](mailto:aes@aesva.com)

# Construction Certification for Stormwater Management/BMP Facilities

Governors Land BMP Facility #11 (Bay 4 Pod 4-Two Rivers Point)  
James City County, Virginia

Prepared By:

Robert C. Moss, PE  
Earthworks Consulting Engineers, Inc.  
4305 Cutshaw Ave.  
Richmond, Virginia 23230  
Phone: (804) 355-4567  
Fax: (804) 355-5958

Prepared For:

James H. Bennett, PE  
Governor's Land Associates  
120 Tredegar Street  
Richmond, Virginia 23219  
Phone: (804) 819-2352  
Fax: (804) 819-2209

I certify to the best of my knowledge and belief that the timber detention structure for this Stormwater Management/BMP facility was constructed in general accordance with the provisions of the approved design plan, specifications, and stormwater management plan, except as specifically noted.

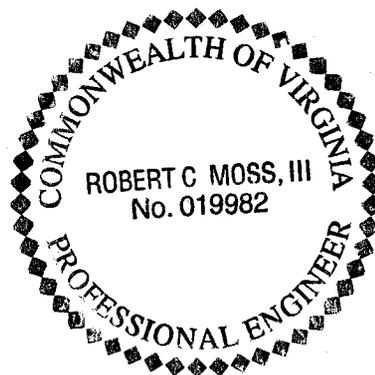
This certification pertains to the embedment and stability of the facility's timber posts, whose construction was not monitored but was later investigated by an engineer utilizing test pits to ascertain post embedment, soil support, and concrete encasement of posts.

No exceptions made.

By:



Robert C. Moss, PE  
Earthworks Consulting Engineers, Inc.



Dated: 3/28/03

**AES CONSULTING ENGINEERS**

Engineering, Surveying and Planning

5248 Olde Towne Road, Suite 1  
WILLIAMSBURG, VIRGINIA 23188

**LETTER OF TRANSMITTAL**

(757) 253-0040  
FAX (757) 220-8994

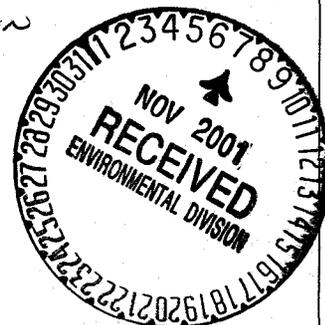
|  |                     |
|--|---------------------|
| DATE<br>November 6, 2001   | JOB NO.<br>7173-4-4 |
| ATTENTION<br>Mr. <del>B</del> Mice Woolson   |                     |
| RE:<br>GOVERNOR'S LAND AT TWO RIVERS<br>TWO RIVERS POINT (BAW 4, P004)<br>JR036j 5-52-95 |                     |

TO JAMES CITY COUNTY ENVIRONMENTAL DIVISION

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items:

- Shop drawings     Prints     Plans     Samples     Specifications  
 Copy of letter     Change order     RECORD DRAWINGS

| COPIES | DATE | NO. | DESCRIPTION  |
|--------|------|-----|--|
| 2      |      |     | RECORD DRAWINGS FOR TIMBER WALL IN<br>TWO RIVERS POINT.<br><br>• RD<br>• FORMS |



THESE ARE TRANSMITTED as checked below:

- For approval     Approved as submitted     Resubmit \_\_\_\_\_ copies for approval  
 For your use     Approved as noted     Submit \_\_\_\_\_ copies for distribution  
 As requested     Returned for corrections     Return \_\_\_\_\_ corrected prints  
 For review and comment     \_\_\_\_\_  
 FOR BIDS DUE \_\_\_\_\_     PRINTS RETURNED AFTER LOAN TO US

REMARKS

WE ARE TRYING TO CATCH UP ON THIS STUFF  
SOONER AS OPPOSED TO LATER. SO...  
THERE WILL BE MORE COMING.

COPY TO \_\_\_\_\_

SIGNED: \_\_\_\_\_

*V. Marc B...*