



# Stormwater Division

## MEMORANDUM

**DATE:** July 28, 2014  
**TO:** Michael J. Gillis, Virginia Correctional Enterprises Document Management Services  
**FROM:** Jacob Smith, Stormwater Intern  
**PO:** 110426  
**RE:** Files Approved for Scanning

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<b>NAME PDF/SCANNED FILE:</b>		FORDS COLONY DRAINAGE IMPROVEMENTS FOR LOTS 61-63	
<b>BMP ID OR GEN FILE NUMBER:</b>	PC084	<b>OWNER NAME:</b>	FORDS COLONY GOLF CLUB
<b>PIN:</b>	3040100002	<b>SITE ADDRESS:</b>	115 FORDS COLONY DR
		<b>LEGAL DESCRIPTION:</b>	MIDD PLANT P-C CHAMPIONSHIP (BLACKHEATH COURSE HOLES 1 - 18)

<b>MAINTENANCE AGREEMENT IN FILE:</b>	N/A	<b>BOOK/PAGE OR DOCUMENT NO.:</b>	N/A	<b>OTHER DESCRIPTION:</b>	N/A
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<b>BOX NO.:</b>	2	<b>COMMENTS:</b>	TRANSMITTAL
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**TRANSMITTAL SHEET**  
**ENGINEERING & RESOURCE PROTECTION → STORMWATER**

Project: Ford's Colony Drainage Improvements Lots 61-63

County Plan No.: SP-18-11

Assigned BMP No.: Drains to PC-084

BMP Type: Drainage improvements

Information Enclosed:

X Record Drawings (Asbuilts) REVISED

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Name: Amy Parker

Date: 6/23/14

Signature: \_\_\_\_\_

**TRANSMITTAL**

Environmental Division

SEP 21 2011

RECEIVED

**DATE:** September 21, 2011

**TO:** Records Management (1)  
Engineering and Resource Protection (1)  
JCSA (2)

**FROM:** Christy H. Parrish, Proffer Administrator

**SUBJECT:** **SP-0018-2011, Ford's Colony Sec. 3 Drainage Improvement SP  
Amendment**

**TAX ID:** 3710300061  
3710300062  
3710300063

**ACTION:** For your files.



**James City County Engineering and Resource  
Protection Division  
Stormwater Management/BMP Record Drawing and  
Construction Certification Review Tracking Form**

Project Name: Ford's Colony Drainage Improvements Lots 61-63 Swinley Forrest  
 County Plan No. (List any amendments): SP-18-11  
 Stormwater Management Facility Type: Storm only drains to PC-084

BMP Phase #:  I  II  III

- Information Package Submittal Date: 6/5/12
- Completeness Check:
  - Record Drawing Date/By: 6/4/12 Jason Grimes AES
  - Construction Certification Date/By: NOT REQ PER WAC
  - RD/CC Standard Forms (Ensure that all forms for the BMP type are included)
  - Insp/Maint Agreement # / Date: \_\_\_\_\_
  - BMP Maintenance Plan Location: N/A
  - Special Considerations: \_\_\_\_\_

Standard E&SC Notes on Approved Plan Requiring RD/CC or County comment in plan review  
 Location (sheet #): \_\_\_\_\_

County BMP ID Code #: Drains to PC-084

- Log into Division's "As-Built Tracking Log"
- Obtain basic site information (GPIN, Owner, Address, etc.)
- Log into Access Database (BMP ID #, Plan No., GPIN, Project Name, etc.)
- Copy from Active Project File (correspondence, H&H, design computations, etc.)
- Create As-Built File using Project File information (File label, folder, copy plan/details/design information, etc.)

Inspector Review of RD/CC (consult with Chief Engineer prior to completion of comments).

Record Drawing Review against Approved Plan prior to Field Inspection.

Final Site Inspection (FI) Performed Date: 6/20/12

Record Drawing (RD) Review Date: 6/5/12

Construction Certification (CC) Review Date: NOT REQ PER WAC

- Actions:
- No comments.
  - Comments. Letter Forwarded. Date: \_\_\_\_\_
  - Record Drawing (RD)
  - Construction Certification (CC)
  - Construction-Related (CR)
  - Site Issues (SI)
  - Other : \_\_\_\_\_

Resubmittal (# and date): \_\_\_\_\_

Re-inspection (if necessary): \_\_\_\_\_

Drainage System Information Acceptable (RD/CC/System Info). Ok for bond release.

Complete "Surety Request Form".

Final Inspection of active file copying any relevant information to "As-Built" file.

On County BMP Inventory (Phase I, II or III).

Copy Final Inspection Report into County BMP Inspection Program file.

Provide Digital Photographs of BMP and save into County BMP Inventory.

Request mylar/reproducible from As-Built plan preparer.

Complete "As-built Tracking Log".

Last check of BMP Access Database (County BMP Inventory).

Add BMP to JCC Hydrology & Hydraulic database (optional).

Add BMP to Municipal BMP list (if a County-owned facility)

Add BMP to PRIDE BMP ratings database.

Inspector: Amy Parker **Final Sign-Off**

Date: 6/21/12<sup>14</sup>

Chief Engineer: [Signature]

Date: 06/23/14

\*\*\* See separate checklist, if needed.



Hampton Roads | Central Virginia | Middle Peninsula  
 5248 Olde Towne Road, Suite 1, Williamsburg, Virginia 23188  
 Phone (757) 253-0040 / Fax (757) 220-8994  
 aesva.com

**Letter of Transmittal**

ATTN: **Bill Cain**

DATE 6/5/12	JOB NO. 5652-96
FROM: Jason Grimes	
RE Fords Colony – Swinley Forest Asbuilts	

CO.: James City County E&RP

Address: 101-C Mounts Bay Road  
 Williamsburg, VA 23185

cc:

WE ARE SENDING YOU THE FOLLOWING ITEMS:

- Attached  
 Under separate cover via  
 Original(s)     Print(s)     Plan(s)     Specification(s)     Change Order  
 Copy of letter(s)     Other:

COPIES	DATE	No. of Pages	DESCRIPTION
2			Asbuilt Drawing Certification and Checklist

Environmental Division  
 JUN 05 2012  
 RECEIVED

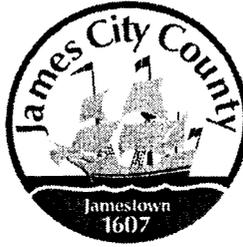
THESE ARE TRANSMITTED as checked below:

- For your approval     For your signature     For review and comment  
 For your use     As you requested     As requested by:  
 Other:

REMARKS:

VIA:  Hand Deliver     UPS Ground     UPS Next Day Air     USPS Mail     Other:

*If enclosures are not as noted, kindly notify us at once.*



Environmental Division

JUN 05 2012

James City County, Virginia  
Environmental Division

RECEIVED

### 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: Ford's Colony Section III Drainage Improvements  
Structure/BMP Name: \_\_\_\_\_  
Project Location: 112, 114, 116 Swinley Forest, Williamsburg, VA 23188  
BMP Location: 0/A  
County Plan No.: SP - 0018 - 2011

Project Type:  Residential  Business Tax Map/Parcel No.: 3710300061, 00062, 00063  
 Commercial  Office BMP ID Code (if known): \_\_\_\_\_  
 Institutional  Industrial Zoning District: R4 (Residential Planned Comm.)  
 Public  Roadway Land Use: \_\_\_\_\_  
 Other \_\_\_\_\_ Site Area (sf or acres): Disturbed Area: 0.08 Ac.

Brief Description of Stormwater Management/BMP Facility:

Concrete lined drainage ditch

Nearest Visible Landmark to SWM/BMP Facility: \_\_\_\_\_

Nearest Vertical Ground Control ( if known ):

JCC Geodetic Ground Control  USGS  Temporary  Arbitrary  Other

Station Number or Name: \_\_\_\_\_

Datum or Reference Elevation: \_\_\_\_\_

Control Description: \_\_\_\_\_

Control Location from Subject Facility: \_\_\_\_\_

PC-OBA

**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: \_\_\_\_\_  
Facility Monitored by County Representative during Construction:  Yes  No  Unknown  
Name of Site Work Contractor Who Constructed Facility: Longhill  
Name of Professional Firm Who Routinely Monitored Construction: N/A  
Date of Completion for SWM/BMP Facility: May 2012  
Date of Record Drawing/Construction Certification Submittal: \_\_\_\_\_

*( 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: Ford's Colony Homeowners Association  
Mailing Address: 100 Manchester Drive  
Williamsburg, VA 23188  
Business Phone: (757) 258-4230 Fax: (757) 258-4065  
Contact Person: Steve Hine Title: \_\_\_\_\_

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  
Williamsburg, VA 23188  
Business Phone: (757) 253-0040  
Fax: \_\_\_\_\_  
Responsible Plan Preparer: Jason Grimes  
Title: Project Manager  
Plan Name: Ford's Colony Section III Drainage Improvements for Lots 61-63  
Firm's Project No. 5652-03  
Plan Date: 7/12/12  
Sheet No.'s Applicable to SWM/BMP Facility: 2 / 3 / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

BMP Contractor: *(Note: Site Work Contractor directly responsible for construction of the Stormwater Management / BMP facility.)*  
Name: Longhill Excavating  
Mailing Address: 5099 Longhill Road  
Williamsburg, VA 23188  
Business Phone: (757) 220-0760  
Fax: \_\_\_\_\_  
Contact Person: Jimmy Minor  
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 Olde Towne Road, Suite 1  
Williamsburg, VA 23188  
Business Phone: (757) 253-0040  
Fax: (757) 869-2924

Name: Jason Grimes, P.E.  
Title: Project Manager

Signature: \_\_\_\_\_  
Date: 6/4/12

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.

**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 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 reproducible.
- ☑ 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.
- N/A 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.
- N/A 8. Elevation of the principal spillway crest or outlet crest of the structure.

- N/A 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.
- N/A 10. Dimensions, locations and elevations of outlet orifices, weirs, slots and drains.
- N/A 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.**
- N/A 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.
- \_\_\_\_\_ 18. Maintenance plan taken from approved design plan transposed onto record drawing set.
- N/A 19. Fencing location and type, if applicable to facility.
- N/A 20. BMP vicinity properly cleaned of stockpiles and construction debris.
- XX 21. No visual signs of erosion or channel degradation immediately downstream of facility.
- XX 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.
- N/A    A2.    Principal spillway consists of reinforced concrete pipe with O-Ring gaskets for watertight joint construction.
- N/A    A3.    Sediment forebays or pretreatment devices provided at inlets to pond. Generally 4 to 6 ft. deep.
- N/A    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.
- N/A    A5.    Adequate fixed vertical sediment depth markers installed in the forebay(s) for future sediment monitoring purposes.
- N/A    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.
- N/A    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).
- N/A    A8.    No trees are present within a zone 15 feet around the embankment toe and 25 feet from the principal spillway structure.
- N/A    A9.    Wet permanent pool, typically 3 to 6 feet deep, is provided and maintains level within facility.
- N/A    A10.    Low flow orifice has a non-clogging mechanism.
- N/A    A11.    A pond drain pipe with valve was provided.
- N/A    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 )

- N/A    B1.    Same requirements as Group A Wet Ponds.
- N/A    B2.    Minimum 2:1 length to width flow path provided across the facility.
- N/A    B3.    Micropool provided at or around outlet from BMP (generally 3 to 6 ft. deep).
- N/A    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.
- N/A    B5.    Adequate wetland buffer provided (Typically 25 ft. outward from maximum design water surface elevation and 15 ft. setback to structures).
- N/A    B6.    No more than one-half (1/2) of the wetland surface area is planted.
- N/A    B7.    Topsoil or wetland mulch provided to support vigorous growth of wetland plants.
- N/A    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 )

- N/A C1. All requirements of Section II, Minimum Standards, apply to Group C facilities as applicable.
- N/A C2. Facility is not located on fill slopes or on natural ground in excess of six (6) percent.
- N/A 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.
- N/A 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.
- N/A C5. Sides of infiltration practice lined with filter fabric.
- N/A 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.
- N/A C7. Stabilization and acceptable vegetative cover established over contributing drainage area prior to conveyance of stormwater to the facility.
- N/A 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.
- N/A C9. Minimum twenty-five (25) foot separation down gradient from any structure.
- N/A C10. Stormwater outfalls provided for overflow associated with larger design storms.
- N/A C11. No visual signs of erosion or channel degradation immediately downstream of facility.
- N/A C12. Facility does not currently cause any apparent surface or subsurface water problems to downgrade properties.
- N/A C13. Observation well provided.
- N/A 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.
- N/A D2. Sediment pretreatment devices provided.
- N/A 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.
- N/A 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.
- N/A 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.
- N/A D6. No visible signs of accumulated silt/sediment were present in the facility following construction or alternately, accumulated silt/sediment was properly removed .
- N/A D7. Filtering system is off-line from storm drainage conveyance system.
- N/A D8. Overflow outlet has adequate erosion protection.
- N/A D9. Deflector, diversion, flow splitter or regulator structure provided to divert the water quality volume to the filtering structure.
- N/A D10. Minimum four (4) inch perforated underdrain provided in a clean aggregate envelope layer beneath the facility.
- N/A 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.
- N/A D12. Stabilization and acceptable vegetative cover established over contributing drainage area prior to conveyance of stormwater to the facility.
- N/A 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 )

- XX E1. All requirements of Section II, Minimum Standards, apply to Group E facilities as applicable.
- XX E2. Open channel system has constructed longitudinal slope of less than four (4) percent.
- XX E3. No visual signs of erosion in the open channel system's soil and/or vegetative cover.
- Inc E4. Open channel side slopes are no steeper than 2H:1V at any location. Preferred channel sideslope is 3H:1V or flatter. *1:1 concrete sides*
- XX 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).
- N/A E6. For E-2 BMPs (Dry Swales), an underdrain system was provided.
- XX E7. Treated timber or rock check dams provided as pretreatment devices for the open channel system.
- N/A E8. Gravel diaphragm provided in areas where lateral sheet flow from impervious surfaces are directly connected to the open channel system.
- N/A 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.
- N/A E10. Open channel system areas with grass covers higher than four (4) to six (6) inches were properly mowed.
- N/A 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.
- XX 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.
- N/A E13. For E-3 BMPs (Biofilters), the bottom width is six (6) feet maximum at any location.
- N/A E14. For E-3 BMPs (Biofilters), sideslopes are 3H:1V maximum at any location.
- N/A 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 )

- N/A F1. All requirements of Section II, Minimum Standards, apply to Group F facilities.
- N/A F2. Basin bottom has positive slope and drainage from all basin inflow points to the riser (or outflow) location.
- N/A 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.
- N/A 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.
- N/A F9. Timbers properly reinforced or concrete footing provided if soil conditions were prohibitive.
- N/A F10. Timber wall cross members extended to a minimum depth of two (2) feet below ground elevation.
- N/A 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.
- N/A 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.
- N/A F14. No visual signs of undercutting of timber walls or clogging of the low orifice were present.
- N/A F15. No visual signs of erosion or channel degradation immediately downstream of facility.
- N/A 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 )*

- N/A    G1.    All requirements of Section II, Minimum Standards, apply to Group G facilities as applicable.
- N/A    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.
- N/A    G3.    Dedicated open space areas are in undisturbed common areas, conservation easements or are protected by other enforceable instruments that ensures perpetual protection.
- N/A    G4.    Provisions included to clearly specify how the natural vegetated areas utilized as dedicated open space will be managed and field identified (marked).
- N/A    G5.    Adequate protection measures were implemented during construction to protect the defined dedicated open space areas.
- N/A    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.
- N/A    SD2.    Horizontal location of all pipe and structures relative to the SWM/BMP facility.
- N/A    SD3.    Type, top elevation and invert elevation of all access type structures (inlets, manholes, etc.).
- N/A    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.

File: Shared\SWMProg\BMP\Certif\RDCC\_fillable.wpd

# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Thursday, Jun 16, 2011

## Hyd. No. 2

### FC Sect 3 Runoff to Conc Ditch

Hydrograph type = Rational  
Storm frequency = 10 yrs  
Time interval = 1 min  
Drainage area = 15.710 ac  
Intensity = 5.137 in/hr  
IDF Curve = JamesCity-NW-14.IDF

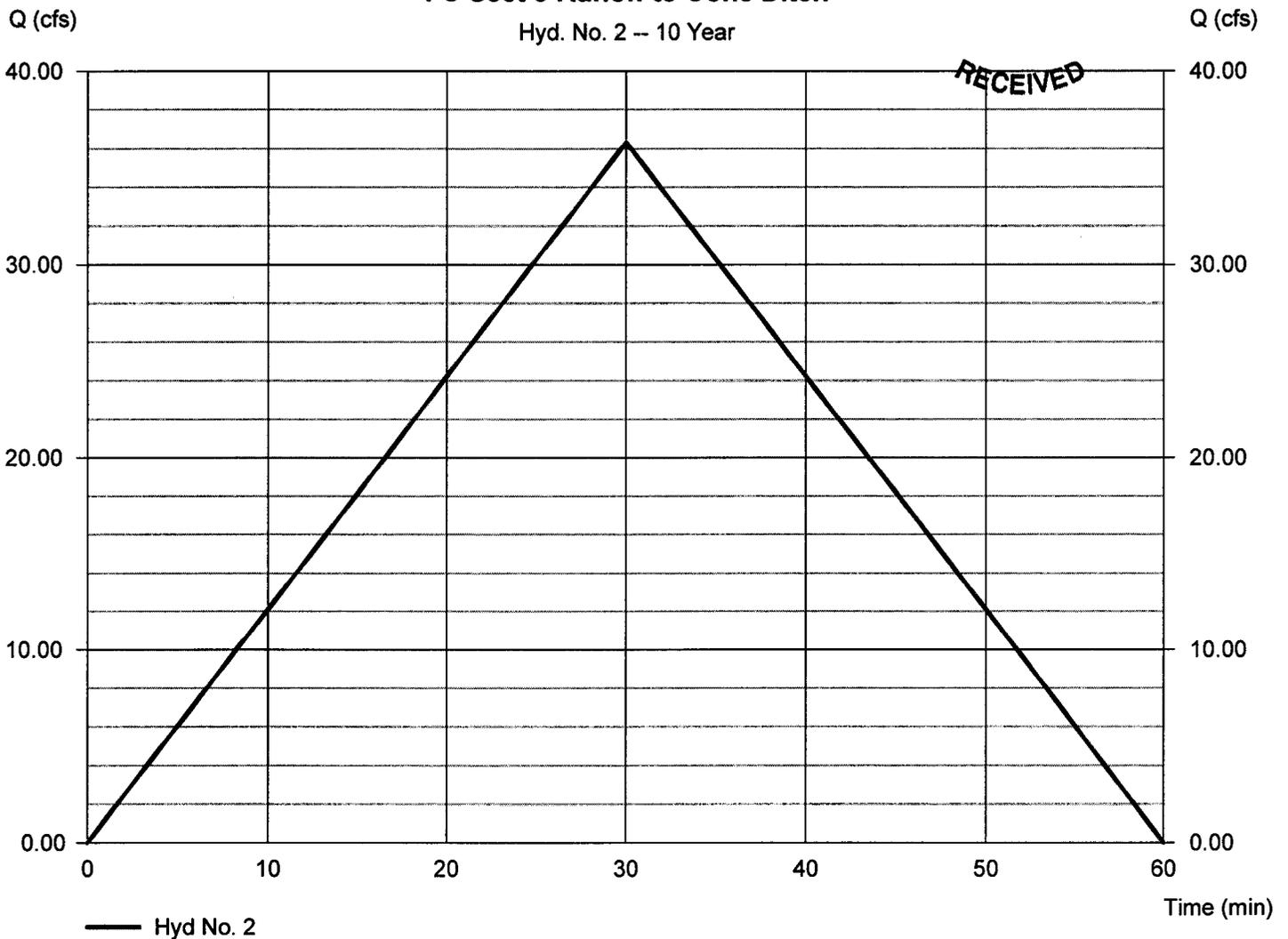
Peak discharge = 36.31 cfs  
Time to peak = 0.50 hrs  
Hyd. volume = 65,364 cuft  
Runoff coeff. = 0.45  
Tc by User = 15.00 min  
Asc/Rec limb fact = 2/2

Environmental Division

JUN 20 2011

### FC Sect 3 Runoff to Conc Ditch

Hyd. No. 2 -- 10 Year



# Channel Report

## Proposed Ditch

### Trapezoidal

Bottom Width (ft) = 1.00  
Side Slopes (z:1) = 2.00, 2.00  
Total Depth (ft) = 1.10  
Invert Elev (ft) = 100.00  
Slope (%) = 2.78  
N-Value = 0.013

### Highlighted

Depth (ft) = 0.98  
Q (cfs) = 36.30  
Area (sqft) = 2.90  
Velocity (ft/s) = 12.51  
Wetted Perim (ft) = 5.38  
Crit Depth,  $Y_c$  (ft) = 1.10  
Top Width (ft) = 4.92  
EGL (ft) = 3.41

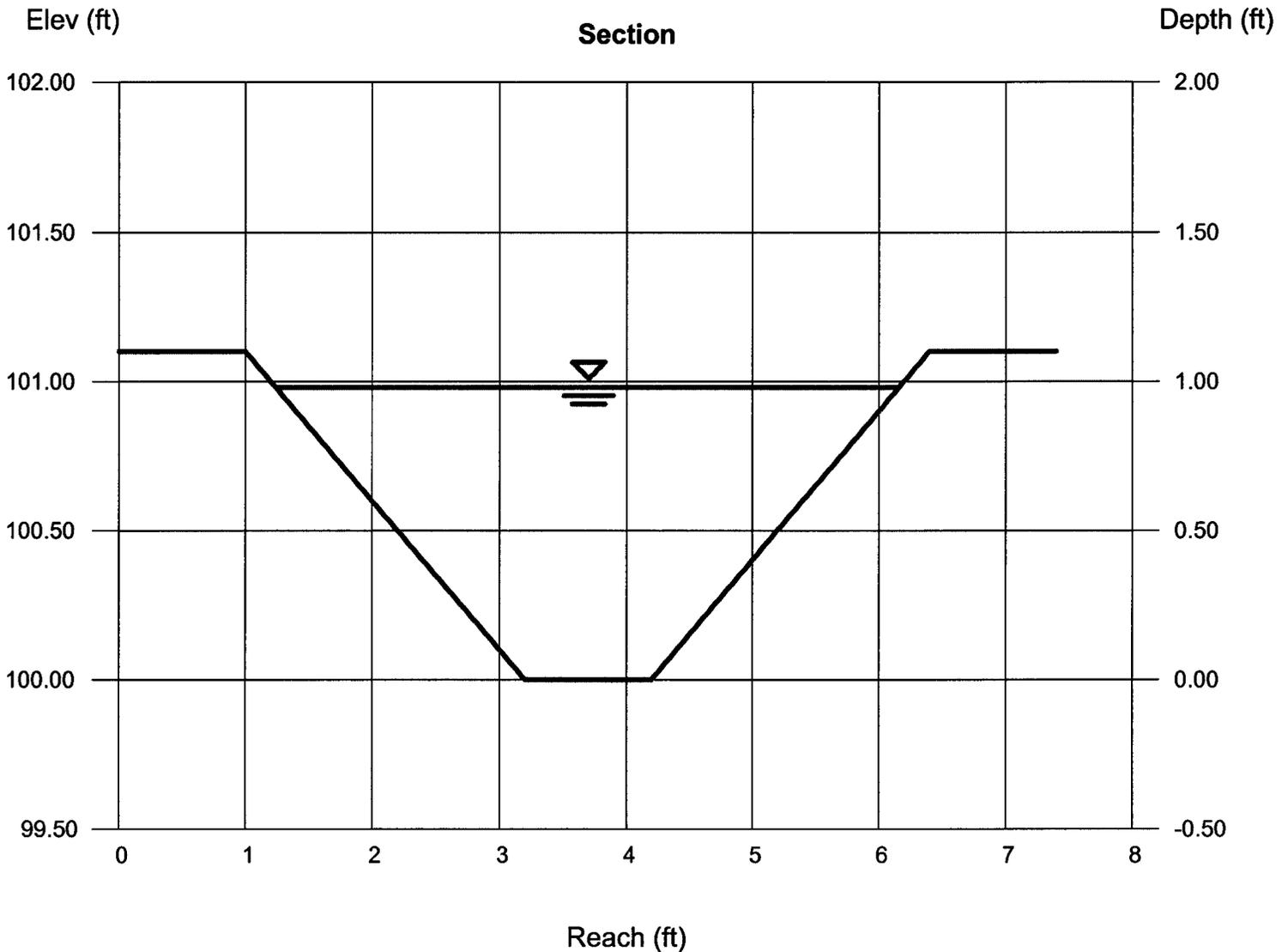
### Calculations

Compute by: Known Q  
Known Q (cfs) = 36.30

Environmental Division

JUN 20 2011

RECEIVED



# Channel Report

## Proposed Ditch (As-Built)

### Trapezoidal

Bottom Width (ft) = 2.00  
 Side Slopes (z:1) = 1.00, 1.00  
 Total Depth (ft) = 1.00  
 Invert Elev (ft) = 100.00  
 Slope (%) = 2.78  
 N-Value = 0.013

### Highlighted

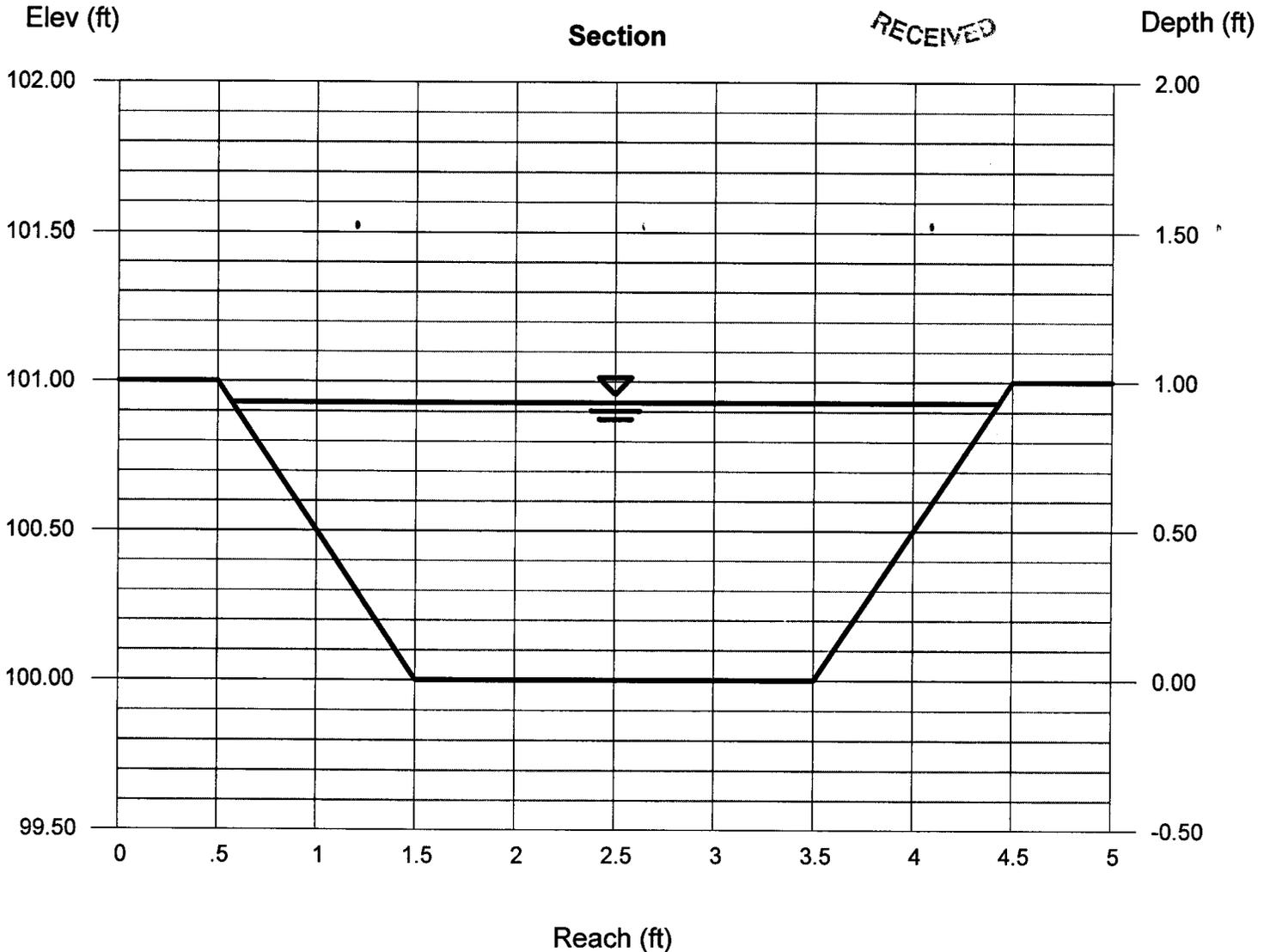
Depth (ft) = 0.93  
 Q (cfs) = 36.30  
 Area (sqft) = 2.72  
 Velocity (ft/s) = 13.32  
 Wetted Perim (ft) = 4.63  
 Crit Depth, Yc (ft) = 1.00  
 Top Width (ft) = 3.86  
 EGL (ft) = 3.69

### Calculations

Compute by: Known Q  
 Known Q (cfs) = 36.30

*Environmental Division*

JUN 05 2012



Environmental Division

JUN 20 2011

RECEIVED

Rev	Date	Description	Rev

Hampton Roads | Central Virginia | Middle Peninsula  
**AES**  
CONSULTING ENGINEERS  
www.aesva.com  
5248 Oak Town Road, Suite 1  
Williamsburg, Virginia 23188  
Phone: (757) 253-0040  
Fax: (757) 253-0884

POWhatan District | James City County | Virginia  
**SECTION III  
FORD'S COLONY  
DRAINAGE IMPROVEMENTS**

Project Controls: JAG/AMR  
Project Number: 6692-03  
Date: 11/22/2010  
Scale: 1"=100'  
Sheet Title: DRAINAGE MAP  
Sheet Number: 1



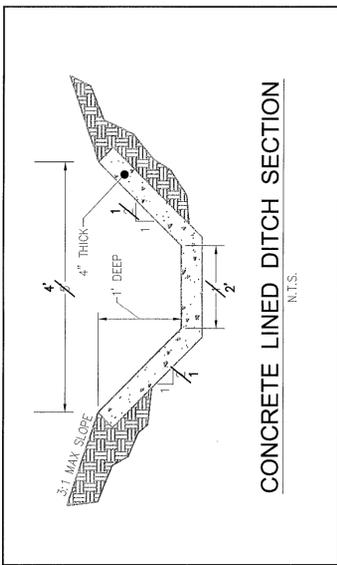
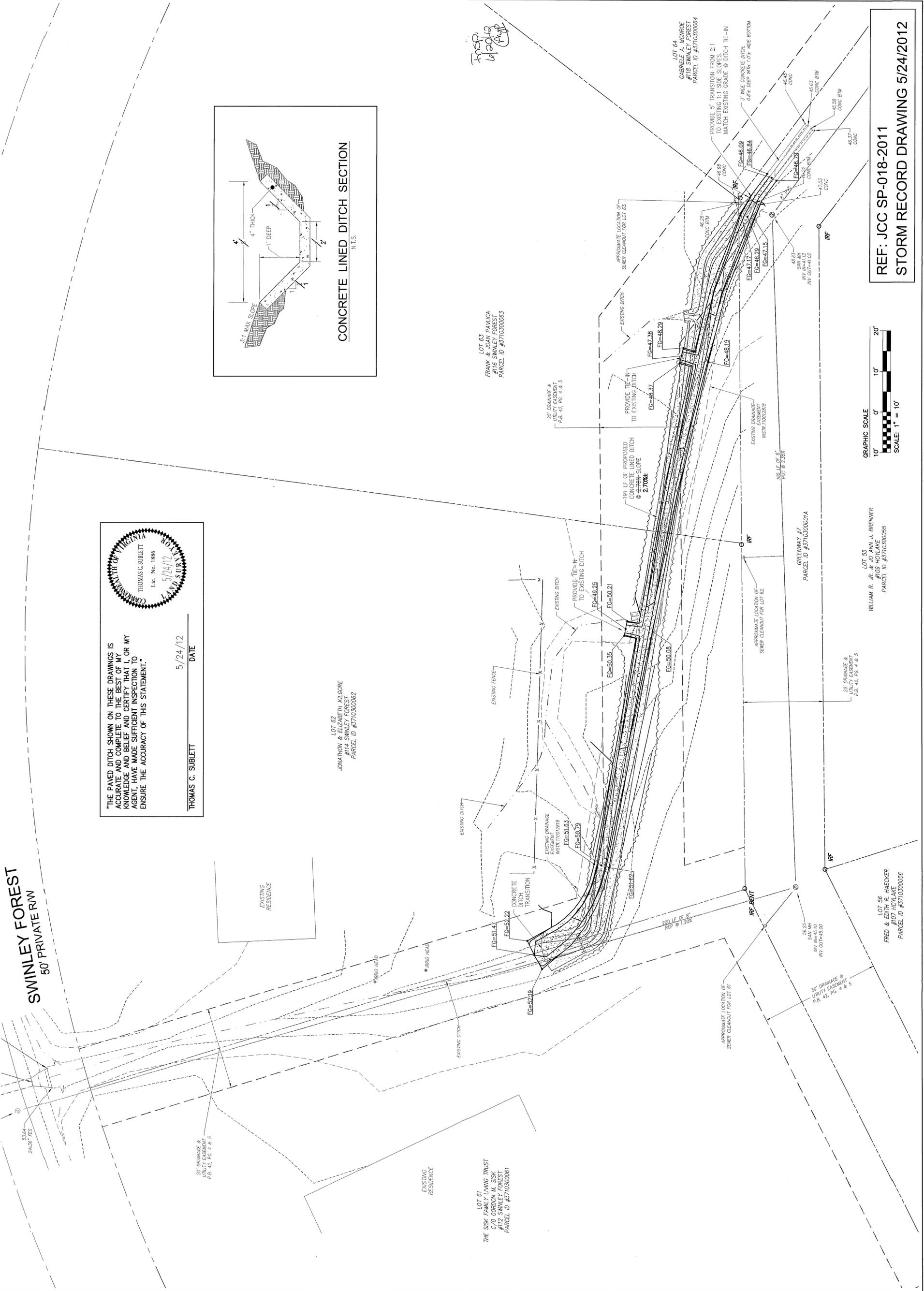
Revised By	Description	Date	Rev.

RECEIVED  
 JUN 05 2012  
 Environmental Division


 AFS CONSULTING ENGINEERS  
 5248 Ohio Towne Road, Suite 1  
 Williamsburg, Virginia 23188  
 Phone: (757) 235-0040  
 Fax: (757) 226-8944  
 www.afsenv.com

SECTION III  
 DRAINAGE IMPROVEMENTS  
 FORD'S COLONY  
 POWHATAN DISTRICT JAMES CITY COUNTY VIRGINIA

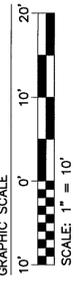
Project Controls: JAG, AMR  
 6552-03  
 Project Number: 523112  
 Scale: 1"=10'  
 Sheet Title: AS-BUILT RECORD DRAWING  
 Sheet Number: 1 OF 1



"THE PAVED DITCH SHOWN ON THESE DRAWINGS IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF AND CERTIFY THAT I, OR MY AGENT, HAVE MADE SUFFICIENT INSPECTION TO ENSURE THE ACCURACY OF THIS STATEMENT."  
 THOMAS C. SUBLETT  
 Lic. No. 1886  
 5/24/12  
 DATE: 5/24/12

SWINLEY FOREST  
 50' PRIVATE R/W

REF: JCC SP-018-2011  
 STORM RECORD DRAWING 5/24/2012



LOT 55  
 WILLIAM R. JR. & ANNE J. BRENNER  
 #108 HOYLAKE  
 PARCEL ID #3710300055

LOT 56  
 FRED & EDI HAECKER  
 #107 HOYLAKE  
 PARCEL ID #3710300056

LOT 62  
 JONATHAN & ELIZABETH KILGORE  
 #114 SWINLEY FOREST  
 PARCEL ID #3710300062

LOT 61  
 THE SISK FAMILY LIVING TRUST  
 #112 SWINLEY FOREST  
 PARCEL ID #3710300061

LOT 63  
 FRANK & JOAN PAVLICA  
 #116 SWINLEY FOREST  
 PARCEL ID #3710300063

LOT 64  
 GABRIELE A. MONROE  
 #118 SWINLEY FOREST  
 PARCEL ID #3710300064

GREENWAY #7  
 PARCEL ID #37103000014

20' DRAINAGE & UTILITY EASEMENT  
 P.B. 42, PG. 4 & 5

30' DRAINAGE & UTILITY EASEMENT  
 P.B. 42, PG. 4 & 5

20' DRAINAGE & UTILITY EASEMENT  
 P.B. 42, PG. 4 & 5

20' DRAINAGE & UTILITY EASEMENT  
 P.B. 42, PG. 4 & 5

24x36' FES  
 53.64'

Insp  
 6/24/12  
 (Signature)

**POOR  
QUALITY**

**ORIGINAL(S) FOLLOW**

**THIS IS THE BEST COPY  
AVAILABLE**

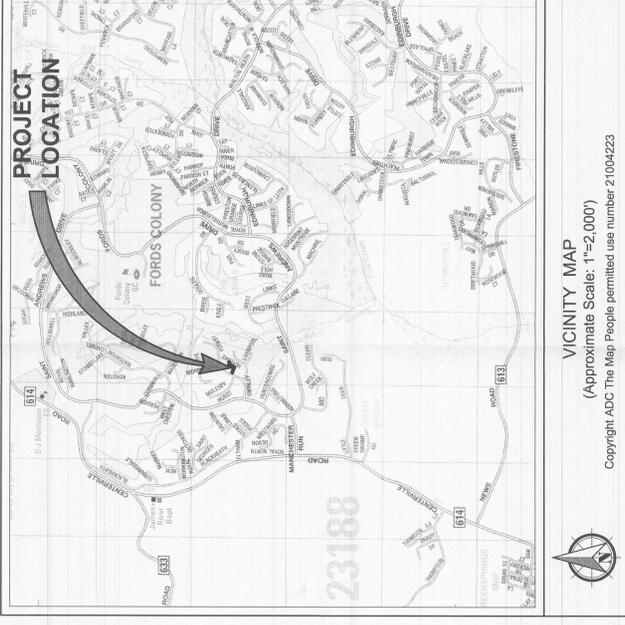
**VCE DOCUMENT CONVERSION CENTER**

# Site Plan For FORD'S COLONY

## SECTION III DRAINAGE IMPROVEMENTS for LOTS 61-63 James City County Virginia Powhatan District

### GENERAL NOTES

- THIS SITE LIES WITHIN THE POWHATAN CREEK WATERSHED.
- ALL ERRORS OR DISCREPANCIES WITH THE PLANS OR EXISTING SITE CONDITIONS SHALL BE REPORTED TO THE ENGINEER OR SURVEYOR OF RECORD BEFORE PROCEEDING WITH THE WORK.
- CONTOUR INTERVAL IS 1 FOOT. EXISTING GRADE IS FROM SURVEY PROVIDED BY AES DATED SEPTEMBER 30, 2010.
- THE CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF THE APPROVED PLANS AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MASS UTILITY (1-800-552-7001) FOR EXISTING UTILITY LOCATIONS AT LEAST 3 WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION, AND A PRIVATE UTILITY LOCATOR FOR THE LOCATING OF PRIVATE UTILITIES.
- THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO ALL OWNERS AND RESIDENTS OF PROPERTY ADJACENT TO THE PROJECT 30 DAYS PRIOR TO THE COMMENCEMENT OF WORK, UNLESS OTHERWISE DIRECTED BY THE OWNER. CONSTRUCTION WITHIN EASEMENTS OR ON PUBLIC RIGHT-OF-WAY REQUIRES 14 DAYS NOTICE WHETHER ADJACENT TO OR LOCATED ON THE ADJOINING PROPERTY. FAILURE TO PROVIDE THE MINIMUM NOTIFICATION TIME WILL RESULT IN SUSPENSION OF WORK.
- THE ABSENCE OF THE OWNER OR THE ENGINEER AT THE JOB SITE DOES NOT, IN ANY WAY, RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH THE DRAWINGS, CONTRACT DOCUMENTS, ADDENDA, AND WRITTEN AUTHORIZED PLAN REVISIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF ANYBODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM WITH THE CURRENT JAMES CITY COUNTY STANDARDS AND SPECIFICATIONS, VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS, VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS, AND ANY OTHER APPLICABLE COUNTY OR STATE ORDINANCES, CODES, AND LAWS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL USE ONLY NEW MATERIALS, PARTS, AND PRODUCTS ON ALL PROJECTS. ALL MATERIALS SHALL BE STORED SO AS TO ASSURE THE PRESERVATION OF THEIR QUALITY AND FITNESS FOR THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO COMMENCEMENT OF WORK INCLUDING, BUT NOT LIMITED TO, LAND DISTURBING, RIGHT-OF-WAY, AND UTILITY PERMITS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF CONSTRUCTION EFFORTS WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT), LOCAL EMERGENCY SERVICES, AND ALL NECESSARY UTILITY COMPANIES INCLUDING, BUT NOT LIMITED TO, ELECTRICITY, NATURAL GAS, TELECOMMUNICATIONS, CABLE TELEVISION, WATER, SEWER, PRIVATE LIGHTING, AND OTHERS THAT MAY BE REQUIRED.
- THE CONTRACTOR SHALL SATISFY HIMSELF AS TO ALL SITE CONDITIONS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL SITE IMPROVEMENTS AS SHOWN ON THE APPROVED PLAN.
- THE CONTRACTOR SHALL REMOVE ALL EXCESS MATERIAL, INCLUDING SOIL AND DEBRIS, FROM THE SITE.
- THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT (SECTION 90-265.14 ET. SEQ. CODE OF VIRGINIA, 1950, AS AMENDED) AND HEREBY AGREES TO HOLD THE DEVELOPER AND THE ENGINEER HARMLESS FROM AND AGAINST ALL CLAIMS OF ANY NATURE WHATSOEVER ARISING OUT OF THE CONTRACTOR'S FAILURE TO COMPLY WITH THE REQUIREMENTS OF SAID ACT.



County Project No.: SP-018-11  
Original Submittal Date: February 16, 2011  
Approval Date:



SP-0018-2011



COUNTY OF JAMES CITY  
FINAL SITE PLAN  
APPROVALS  
File Dept: JAG/AV DATE: 7/20/11  
Health Dept: JAG/AV  
VDDT: JAG/AV  
Permitting: JAG/AV  
Engineering: JAG/AV  
Zoning Admin: JAG/AV  
JCSA: JAG/AV  
County Eng: JAG/AV  
Other: JAG/AV

### INDEX OF SHEETS

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	ENVIRONMENTAL INVENTORY
3	SITE PLAN

### OWNER/DEVELOPER INFORMATION:

FORD'S COLONY HOMEOWNERS ASSOCIATION  
CONTACT: MR. STEVE HINE  
100 MANCHESTER DRIVE  
WILLIAMSBURG, VIRGINIA 23186  
PHONE NO.: (757) 258-4230  
FAX NO.: (757) 258-4666

### CERTIFIED RESPONSIBLE LAND DISTURBER:

JASON A. GRIMES, P.E.  
AES CONSULTING ENGINEERS  
5248 OLDE TOWNE ROAD, SUITE 1  
WILLIAMSBURG, VIRGINIA 23188  
TELEPHONE: 757-255-0040

\* FOR SITE PLAN REVIEW PROCESS ONLY. OWNER OR CONTRACTOR SHALL NAME RESPONSIBLE LAND DISTURBER FOR CONSTRUCTION PROCESS.

### SITE DATA:

SITE ADDRESS: 112, 114, & 116 SWINLEY FOREST, WILLIAMSBURG, VIRGINIA 23188  
PARCEL NUMBERS: 3710300062, 3710300063  
ZONING: R4 (RESIDENTIAL PLANNED COMMUNITY)  
LIMITS OF DISTURBANCE: 3,577 S.F., 0.08 AC ±  
FLOOD HAZARD MAP: THIS PROPERTY IS IN FLOOD ZONE "X" AS SHOWN ON MAP NUMBER 61086C0120C. FOR COMMUNITY NUMBER 5102001, DATED 09/28/2007 OF THE FLOOD INSURANCE RATE MAPS FOR JAMES CITY COUNTY, VIRGINIA. ZONE "X" IS DEFINED AS AREAS OUTSIDE THE 500 YEAR FLOOD PLAIN.

By	Date	Description
JAG	7/17/11	REVISED PER JCC COMMENTS DATED 7/20/11

CONSULTING ENGINEERS  
**AES**  
5248 Olde Towne Road, Suite 1  
Williamsburg, Virginia 23188  
Phone: (757) 255-0040  
Fax: (757) 220-8994  
www.aesva.com

FORD'S COLONY  
SECTION III  
DRAINAGE IMPROVEMENTS FOR LOTS 61-63  
JAMES CITY COUNTY  
VIRGINIA

Project Controls: JAG/AMRS/SVC  
Project Number: 6952-03  
Scale: Date: 2/16/2011  
Sheet Title: COVER SHEET  
Sheet Number: 1 OF 3



