

CC 301-07

Juleo, IIC

~~51829-6718~~ other

51829-6718

Martin O'Malley  
Governor

Anthony G. Brown  
Lt. Governor



Margaret G. McHale  
Chair

Ren Serey  
Executive Director

STATE OF MARYLAND  
CRITICAL AREA COMMISSION  
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401

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

[www.dnr.state.md.us/criticalarea/](http://www.dnr.state.md.us/criticalarea/)

May 15, 2008

Holly Tompkins  
Queen Anne's County  
Department of Land Use, Growth Management  
and Environment  
160 Coursevall Drive  
Centerville, MD 21617

**Re: MSIP#04-07-11-0003-C; Juleo, LLC Site Plan  
Island Plaza Drive, Stevensville**

Dear Ms. Tompkins:

Thank you for providing the resubmitted site plan and information on the above referenced project. The applicant proposes to develop a property located in the Intensely Developed Area (IDA) of the Chesapeake Bay Critical Area with commercial development. The following comments apply to the proposal.

1. As you know the County Code § 14:1-37.E(3) states that "the clearing or cutting of forest or developed woodland for development or redevelopment shall provide insofar as possible that no more than 20% of the forest or woodland is removed." The plans indicate that 8.685 acres on this site are woodlands in the IDA, which would allow the applicant to clear 1.337 acres for development. Neither the applicant nor the County has submitted documentation to this office that it is not possible to develop the site within the allowed clearing limit. This office can not concur that the proposal meets the requirements of the County Critical Area Program until adequate documentation has been provided that County Code § 14:1-37.E (3) has been met.
2. It is unclear how County Code § 14:1-37.E (3) (d) requirements were met for the clearing violation that occurred on this site. Please clarify how it was demonstrated to Planning and Zoning that the mitigation requirement could not be met onsite and the fee in lieu could be used and how the violation was rectified based on County Code. This office can not concur that the proposal meets the requirements of the County Critical Area Program

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Holly Tompkins  
May 15, 2008  
Page 2 of 2

until adequate documentation has been provided that County Code § 14:1-37.E (3) has been met.

Thank you for the opportunity to comment. Please contact me at (410) 260-3479 if you have any questions.

Sincerely,



Marshall Johnson  
Natural Resources Planner  
cc: QC 301-07

Martin O'Malley  
Governor

Anthony G. Brown  
Lt. Governor



Margaret G. McHale  
Chair

Ren Serey  
Executive Director

**STATE OF MARYLAND  
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April 24, 2008

Holly Tompkins  
Queen Anne's County  
Department of Land Use, Growth Management  
and Environment  
160 Coursevall Drive  
Centerville, MD 21617

**Re:MSIP#04-07-11-0003-C; Juleo, LLC Site Plan  
Island Plaza Drive, Stevensville**

Dear Ms. Tompkins:

Thank you for providing the resubmitted site plan and information on the above referenced project. The applicant proposes to develop a property located in the Intensely Developed Area (IDA) of the Chesapeake Bay Critical Area with commercial development. The following comments apply to the proposal.

1. The proposal must comply with the 20% clearing limit of the County Code for IDA as confirmed by the County's response.
2. The applicant has submitted plans showing that forest clearing occurred on the site within the Critical Area Buffer during Spring 2007. The applicant requested a permit from the County which was reviewed by Planning and Zoning, as indicated by the response letter from County Planning and Zoning dated June 22, 2006 stating that the clearing was not approved. That letter (attached) informed the applicant that project approval or a development plan review was required for the proposed tree clearing. Please see COMAR 27.01.09.01.C(7) which requires that local jurisdictions shall expand the Buffer beyond 100 feet to include contiguous, sensitive areas, such as steep slopes, hydric soils, or highly erodible soils, whose development or disturbance may impact streams, wetlands, or other aquatic environments. Under County Code § 14:1-51 and COMAR 27.01.09.01.C(2) new development activities, including clearing of existing natural vegetation, construction of new roads, parking areas or other impervious surfaces are not permitted in the Buffer. A variance to this standard is required for impacts to the Buffer.

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Holly Tompkins  
April 24, 2008  
Page 2 of 2

For further clarification on this subject, please review the March 5, 2007 letter comments 4 through 7 from this office (attached).

3. It is unclear how County Code § 14:1-37.E (3)(d) requirements were met for the clearing violation that occurred on this site. Please clarify how it was demonstrated to Planning and Zoning that the mitigation requirement could not be met onsite and the fee in lieu could be used and how the violation was rectified based on County Code.

Thank you for the opportunity to comment. Please contact me at (410) 260-3479 if you have any questions.

Sincerely,



Marshall Johnson  
Natural Resources Planner

cc: QC 301-07

Enclosed: June 22, 2006 letter  
March 5, 2007 letter



DEPARTMENT OF PLANNING & ZONING  
QUEEN ANNE'S COUNTY  
160 COURSEVALL DR.  
CENTREVILLE, MARYLAND 21617

410-758-4088 Permits  
410-758-3972 Fax  
410-758-1255 Planning  
410-758-2905 Fax  
410-758-2126 TDD

June 22, 2006

Juleo, LLC  
c/o Mr. Leo A. Maier  
2606 Cecil Drive  
Chester, Maryland 21619

Dear Mr. Maier:

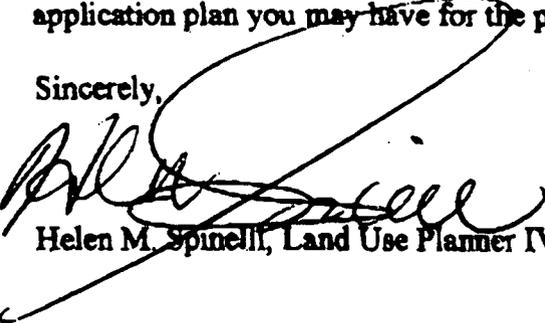
Re: Tax Map 56, Parcel 250

Please be advised that Permit Application #1804055578 to "remove undergrowth, saplings, debris, illegally discarded items found on site, fire hazard brush, dead timber, abandoned billboards, and general clean up over entire 10.7 acre site as shown on plat" may not be approved.

Pursuant to further review by staff from Queen Anne's County Department of Planning and Zoning, the Critical Area Commission and Planning Commission Attorney some of the activities described in the permit are subject to Article VII Section 14:1-28 B. (1) and (2). A timber harvest plan must be submitted for review by the Department to the extent the Permit Application request approval for the "cutting and clearing of trees." That activity constitutes a "development activity" for which you must receive "project approval." Alternatively, a development plan may be submitted for review in accordance with Chapter 18 and Chapter 14 of the Queen Anne's County for a commercial use of this site.

Staff from Planning and Zoning is available to meet with you or your agent regarding any pre-application plan you may have for the property.

Sincerely,

  
Helen M. Spinelli, Land Use Planner IV

c: Christina Clark, McCrone, Inc.  
Michael Foster, Esq.  
Chris Clark, Critical Area Commission  
James Barton, Zoning Administrator  
File

281-07



STATE OF MARYLAND  
CRITICAL AREA COMMISSION  
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401  
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March 5, 2007

Mr. James Barton  
Queen Anne's County Planning and Zoning  
160 Coursevall Drive  
Centreville, MD 21617

RE: Juleo, LLC (Leo Maier) Property, Queen Anne's County TM 56, Parcel 250

Dear Mr. Barton:

This office is in receipt of a copy of a sediment control plan for a road as well as a timber harvest plan for the parcel referenced above. As you know, Commission staff also visited the site with County staff and took photographs on Thursday, February 1, 2007. After review of the documents provided by your office, we have the following comments:

1. Timber Harvest Plans are not considered "approved" until reviewed and approved by the District Forestry Board and the DNR Forester. To our knowledge, this plan did not receive approval prior to the harvest taking place.
2. Timber Harvest Plans require the regeneration of forest on the site, regardless of the use of the wood.
3. An erosion and sediment control plan is required for all harvests exceeding 5,000 sq. ft. of disturbed area, or which cross any perennial or intermittent watercourse. See the Code of Maryland Regulations 26.17.01-.11 and Queen Anne's County Code §14:1-28(B)(2).
4. Regardless of the applicant's Timber Harvest Plan, clearing of the trees on this site without prior approval is a violation of the County's Critical Area Ordinance.
5. McCrone, Inc., during work for the property owner directly to the west of the subject site, determined that "Thompson Creek is in fact tidal north of U.S. Rt. 50...As such the standard 300 foot shore buffer applies to this property." (See enclosed copy of letter from Christina Clark to Steve Cohoon dated February 10, 2006.) Thompson Creek flows along the western boundary of the Juleo, LLC property. The 300-foot

Mr. James Barton  
March 5, 2007  
Page 2 of 2

shore buffer, the 100-foot Critical Area Buffer and expanded Buffer to include the contiguous nontidal wetlands are not properly shown on any of the submitted plans. It is my understanding that the Planning Commission has not granted any shore buffer reduction for this property.

6. Critical Area Commission staff has requested MDE to review whether the Juleo, LLC nontidal wetland permit was properly issued. The proposed nontidal wetland disturbance within the Critical Area portion of the site is actually disturbance to the expanded Critical Area Buffer. This was not shown on the plans provided to MDE. Buffer disturbance for a new road is prohibited by §14:1-51(A) of the County Code.
7. As it is clearly evident that the applicant plans on developing the site, we recommend the County deny approval for the proposed road and any associated grading permit. No further development activity should occur on this site without appropriate site plan review by the County Planning Department and Planning Commission.

Thank you for the opportunity to review and comment on these plans. For your files, I have enclosed a copy of the photographs taken on the site on February 1, 2007. Please notify us of any action taken by the County to address the outstanding violation on this site. If you have any questions regarding these comments, please contact me at (410) 260-3477.

Sincerely,



LeeAnne Chandler  
Science Advisor

Enclosure

cc: Steve Cohoon  
Helen Spinelli  
Patrick Hager, DPW Roads  
Tony Riggi, SCD  
Amanda Sigillito, MDE, Nontidal Division Chief  
Chris Pajak, MDE Nontidal  
Teri Batchelor, DNR Forest Service

Martin O'Malley  
Governor

Anthony G. Brown  
Lt. Governor



Margaret G. McHale  
Chair

Ren Serey  
Executive Director

STATE OF MARYLAND  
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February 25, 2008

Holly Tompkins  
Queen Anne's County  
Department of Land Use, Growth Management  
and Environment  
160 Coursevall Drive  
Centerville, MD 21617

**Re:MSIP#04-07-11-0003-C; Juleo, LLC Site Plan  
Island Plaza Drive, Stevensville**

Dear Ms. Tompkins:

Thank you for providing the resubmitted site plan and information on the above referenced project. The applicant proposes to develop a property located in the Intensely Developed Area (IDA) of the Chesapeake Bay Critical Area with commercial development. This office has the following comments.

1. The proposed forest clearing appears to exceed the 20% allowed in the IDA. Please have the applicant revise the plans to comply with the clearing allowance of the County Code for IDA.
2. It is not clear whether the tree clearing referred to in the November 15, 2007 letter from McCrone, Inc that already occurred on this site, took place within the expanded Critical Area Buffer. County Code requirements of § 14:1-51 (Buffer standards and requirements) states that development activities, including clearing of existing natural vegetation, construction of new roads, parking areas or other impervious surfaces are not permitted in the Critical Area Buffer. Please have the applicant show the location of the clearing referenced, and explain whether it occurred in the expanded Critical Area Buffer. If necessary, the applicant should address the requirements of § 14:1-51 and propose appropriate mitigation for any disturbance to the Expanded Buffer.
3. Letter of Authorization 200661791/06-NT-2020 explains that its authorization does not include infringement of State or local laws or regulations, nor does it obviate the need to obtain required authorizations or approvals from State or local agencies. Based on County Code § 14:1-51, it appears that new development activity, including any of the work related to the Authorization No. 200661791/06-NT-2020, is not permitted in the

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Holly Tompkins  
February 25, 2008  
Page 2 of 2

Critical Area Buffer unless a variance for Buffer impacts has been approved and mitigation has been provided. No further development should occur on this site prior to approval of a variance for the impacts of the road on the Buffer. Please note that in the previous letter dated March 5, 2007, this office recommended the County deny approval of the road and any associated grading permit until appropriate site plan review could occur.

4. It appears that the County has approved a proposal by the applicant in the form of a letter dated April 5, 2007 by Michael R. Foster and signed by County Attorney and Zoning Administrator allowing the applicant to mitigate for clearing on the site by payment in lieu of \$3920. County Code § 14:1-37.E (3)(d) requires the fee in lieu equal the total cost of replacing the cleared forest land, and the applicant must demonstrate to the satisfaction of the Planning and Zoning Office that mitigation requirements, on-site or off-site, cannot be reasonably accomplished. Please clarify how it was demonstrated that the fee in lieu could be used, how the fee was determined, and what clearing the agreed upon "112 trees x \$35" would be replacing.

Thank you for the opportunity to comment. Please contact me at (410) 260-3479 if you have any questions.

Sincerely,



Marshall Johnson  
Natural Resources Planner

cc: QC 301-07

Martin O'Malley  
Governor

Anthony G. Brown  
Lt. Governor



Margaret G. McHale  
Chair

Ren Serey  
Executive Director

STATE OF MARYLAND  
CRITICAL AREA COMMISSION  
CHESAPEAKE AND ATLANTIC COASTAL BAYS

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December 6, 2007

Holly Tompkins  
Queen Anne's County  
Department of Land Use, Growth Management and Environment  
160 Coursevall Drive  
Centerville, MD 21617

**Re: MSIP#04-07-11-0003-C; Juleo, LLC Site Plan  
Island Plaza Drive, Stevensville**

Dear Ms. Tompkins:

Thank you for providing the site plan and information on the above referenced project. The applicant proposes to develop a property located in the Intensely Developed Area (IDA) of the Chesapeake Bay Critical Area with commercial development. This office has the following comments.

As stated in the previous letter from this office to Mr. James Barton at the County dated March 5, 2007, a Critical Area violation has occurred on the site and development should not be permitted until it has been resolved. Please provide documentation of the status of the violation explaining how the site has been brought into compliance with the County Critical Area Program regulations. No permits for development on this site should be approved until the violation and additional issues outlined in the March 5, 2007 letter have been resolved, as requirements for compliance may require alteration of the proposal.

Please note that the 100-foot Critical Area Buffer includes the extent of the non-tidal wetland on the western portion of the site.

Thank you for the opportunity to comment. Please contact me at (410) 260-3479 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Marshall Johnson".

Marshall Johnson  
Natural Resources Planner  
cc: QC 300-07



STATE OF MARYLAND  
CRITICAL AREA COMMISSION  
CHESAPEAKE AND ATLANTIC COASTAL BAYS  
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[www.dnr.state.md.us/criticalarea/](http://www.dnr.state.md.us/criticalarea/)

March 5, 2007

Mr. James Barton  
Queen Anne's County Planning and Zoning  
160 Coursevall Drive  
Centreville, MD 21617

RE: Juleo, LLC (Leo Maier) Property, Queen Anne's County TM 56, Parcel 250

Dear Mr. Barton:

This office is in receipt of a copy of a sediment control plan for a road as well as a timber harvest plan for the parcel referenced above. As you know, Commission staff also visited the site with County staff and took photographs on Thursday, February 1, 2007. After review of the documents provided by your office, we have the following comments:

1. Timber Harvest Plans are not considered "approved" until reviewed and approved by the District Forestry Board and the DNR Forester. To our knowledge, this plan did not receive approval prior to the harvest taking place.
2. Timber Harvest Plans require the regeneration of forest on the site, regardless of the use of the wood.
3. An erosion and sediment control plan is required for all harvests exceeding 5,000 sq. ft. of disturbed area, or which cross any perennial or intermittent watercourse. See the Code of Maryland Regulations 26.17.01-.11 and Queen Anne's County Code §14:1-28(B)(2).
4. Regardless of the applicant's Timber Harvest Plan, clearing of the trees on this site without prior approval is a violation of the County's Critical Area Ordinance.
5. McCrone, Inc., during work for the property owner directly to the west of the subject site, determined that "Thompson Creek is in fact tidal north of U.S. Rt. 50...As such the standard 300 foot shore buffer applies to this property." (See enclosed copy of letter from Christina Clark to Steve Cohoon dated February 10, 2006.) Thompson Creek flows along the western boundary of the Juleo, LLC property. The 300-foot

Mr. James Barton  
March 5, 2007  
Page 2 of 2

shore buffer, the 100-foot Critical Area Buffer and expanded Buffer to include the contiguous nontidal wetlands are not properly shown on any of the submitted plans. It is my understanding that the Planning Commission has not granted any shore buffer reduction for this property.

6. Critical Area Commission staff has requested MDE to review whether the Juleo, LLC nontidal wetland permit was properly issued. The proposed nontidal wetland disturbance within the Critical Area portion of the site is actually disturbance to the expanded Critical Area Buffer. This was not shown on the plans provided to MDE. Buffer disturbance for a new road is prohibited by §14:1-51(A) of the County Code.
7. As it is clearly evident that the applicant plans on developing the site, we recommend the County deny approval for the proposed road and any associated grading permit. No further development activity should occur on this site without appropriate site plan review by the County Planning Department and Planning Commission.

Thank you for the opportunity to review and comment on these plans. For your files, I have enclosed a copy of the photographs taken on the site on February 1, 2007. Please notify us of any action taken by the County to address the outstanding violation on this site. If you have any questions regarding these comments, please contact me at (410) 260-3477.

Sincerely,



LeeAnne Chandler  
Science Advisor

Enclosure

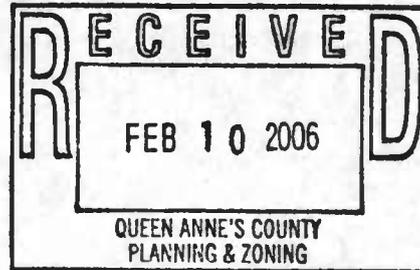
- cc: Steve Cohoon  
Helen Spinelli  
Patrick Hager, DPW Roads  
Tony Riggi, SCD  
Amanda Sigillito, MDE, Nontidal Division Chief  
Chris Pajak, MDE Nontidal  
Teri Batchelor, DNR Forest Service

# McCRONE

- Engineering
- Environmental Sciences
- Construction Services
- Land Planning & Surveying

February 10, 2006

Mr. J. Steven Cohoon  
Deputy Director  
Queen Anne's County Planning & Zoning  
160 Coursevall Drive  
Centreville, MD 21617



**RE: SHORE BUFFER REDUCTION REQUEST FOR LOVE POINT ROAD, L.P.  
PROPERTY IN STEVENSVILLE, MARYLAND, MASP #04-05-06-0002-C  
McCRONE, INC. JOB #D1030291**

Dear Mr. Cohoon:

Through recent field observations, it has been determined that Thompson Creek is in fact tidal north of U.S. Rt. 50. This is contrary to information contained on the 1972 State Wetland Maps, which show the extent of tidal influence ending south of U.S. Rt. 50. As such, the standard 300 foot shore buffer applies to this property. We are requesting a shore buffer reduction from 300 feet to a width that varies between 100 and 178 feet.

The request for reduction is consistent with Section 18:1-67.B(3) of the Queen Anne's County Zoning and Subdivision Regulations, which permits reasonable development within the standard shore buffer if the project is within a growth area with an adopted community plan and it located within a zoning district that permits large-scale, master planned nonresidential development and further provides that the site design would be improved by a reduction of the buffer.

We believe the project meets the requirements outlined in the Code for the following reasons:

1. The property is zoned Urban Commercial and lies within the Stevensville Community Plan. The UC zoning district allows up to 80 percent impervious area and 40 percent floor area for nonresidential uses. The property cannot be fully utilized as zoned without the requested buffer reduction.
2. A site plan was approved for the Stevensville Professional Center by the County in the summer of 1996 for this property that included three medical buildings totaling 60,600 square feet. The building proposed on parcel 334 fell within approximately 120 feet of the edge of Thompson Creek. Development of medical and/or business park on these properties has been contemplated and assumed since 1995.

**RECEIVED**

FEB 15 2006

McCrone, Inc. • 207 N. Liberty Street • Suite 100 • Centreville, Maryland 21617  
410-758-2237 • 410-822-3322 • Fax 410-758-2464  
www.mccrone-inc.com • E-Mail [civil@mccrone-inc.com](mailto:civil@mccrone-inc.com)

*a subsidiary of Design Teams, Inc.*

CRITICAL AREA COMMISSION

3. The existing stormwater pond that serves the building on parcel 332 and is intended to serve future development on the property falls entirely within the 300 foot shore buffer. Impact already exists in the buffer.
4. We have minimized the request for shore buffer reduction, by including the area of nontidal wetlands and nontidal wetlands buffer within the modified shore buffer. The proposed shore buffer varies in width from 100 to 178 feet.

We had resubmitted the site plan for the medical/professional building on January 13, 2006 and pulled the project off the February agenda pending submittal of this request. We ask that the site plan submitted on January 13, 2006 be placed on the March 9, 2006 Planning Commission agenda for major site plan approval. If you have questions or additional comments, please contact me at 410-758-2237.

Sincerely,

McCRONE, INC.



Christina Pompa Clark, AICP  
Assistant Branch Manager

Enclosures

pc: Robert Eisinger, Love Point Road, L.P.  
Joseph A. Stevens, Esq.







Jules WC, BC.









Robert L. Ehrlich, Jr.  
*Governor*

Michael S. Steele  
*Lt. Governor*



Martin G. Madden  
*Chairman*

Ren Serey  
*Executive Director*

**STATE OF MARYLAND  
CRITICAL AREA COMMISSION  
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(410) 260-3460 Fax: (410) 974-5338

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**INTEROFFICE MEMORANDUM**

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**TO:** FILE QC160-00 MAIER  
**FROM:** CHRIS CLARK   
**SUBJECT:** CALL WITH QA COUNTY PLANNING AND ZONING  
**DATE:** 6/23/2006  
**CC:**

---

The purpose of this note to the file is to document a phone conversation between myself (Chris Clark) and Helen Spinelli, Queen Anne's County Land Use Planner IV. Ms. Spinelli and I had a conversation regarding the Leo Maier property on Route 50W in Queen Anne's County. Ms. Spinelli apparently spoke with the applicant's (Mr. Maier) attorney Mr. Michael Foster about the issuance of a permit to clear a portion of the site. Ms. Spinelli told Mr. Foster that the County had decided not to issue the permit to Mr. Maier. Mr. Foster told Ms. Spinelli that he was going to tell his client to go ahead and bush hog the site. Ms. Spinelli told Mr. Foster that she would fax him a letter immediately stating the County's position. CAC also received a copy of that letter.

###

April 21, 2006

Ms. Helen Spinelli  
Queen Anne's County Department of Planning and Zoning  
160 Coursevall Drive  
Centreville, MD 21617

RE: Queen Anne's County Map 56, Parcel 250 – Maier Property

Dear Ms. Spinelli:

Thank you for meeting with me at the above referenced property yesterday for a site review. The property is reported to be approximately 10.7± acres. Much of the property is within the Critical Area and is classified as an Intensely Developed Area (IDA) under the Queen Anne's County Critical Area Program. The site is fully forested and contains large portions of mapped non-tidal wetlands.

The applicant has requested permits to clear a 12 foot wide road approximately 160 feet into the property through a right-of-way on the eastern portion of the parcel outside of the Critical Area. This road will impact approximately 865 square feet of non-tidal wetland. It is my understanding that MDE has issued a permit for this impact. In addition, the applicant has requested to perform clearing within the Critical Area portion of the property.

The applicant must request and receive a letter from the Department of Natural Resources Wildlife and Heritage Program outlining any potential impacts to threatened or endangered species before proceeding with any activity within the Critical Area. Please note that an initial review from this office indicates the property is classified as a Sensitive Species Project Review Area.

The clearing and cutting of trees affecting more than one acre in any forest or woodland, regardless of its designation, is subject to Queen Anne's County Code Article VII §14:1-

Ms. Spinelli  
Leo Maier Property

Page 2  
April 21, 2006

28.B(1) and §14:1-28.B(2). Please be aware that if a timber harvest plan is pursued it may delay development on the parcel for a period of time after the clearing.

It is the view of the Commission that any activities associated with clearing of vegetation on this property should only be approved when accompanied by a request for project review and approval. Unless the clearing is performed as outlined in the above referenced code, the Commission would view the applicant's request as development activity and it would be subject to the site performance standards as outlined in Article IX §14:1-37D.(1)-(7) and §14:1-37E.(1)-(4).

Thank you for providing the Critical Area Commission the opportunity to comment on the above site. If you have any questions or comments please contact me directly at 410-260-3476.

Best regards,

Chris Clark  
Natural Resources Planner

cc: QC160-00



*Queen  
Anne's  
County*

**DEPARTMENT OF LAND USE, GROWTH  
MANAGEMENT & ENVIRONMENT**

160 Coursevall Drive  
Centreville, MD 21617

Telephone Community Planning: (410) 758-1255  
Fax Community Planning: (410) 758-2905  
Telephone Land Use: (410) 758-1255  
Fax Land Use: (410) 758-2905  
Telephone Permits: (410) 758-4088  
Fax Permits: (410)758-3972

**County Commissioners:**

Eric S. Wargotz, M.D., Commission President  
Courtney M. Billups, District 1  
Paul L. Gunther, District 2  
Gene M. Ransom III, District 3  
Carol R. Fordonski, District 4

February 14, 2008

McCrone, Inc  
c/o Christina Clark, AICP  
Assistant Branch Manager  
207 North Liberty Street, Suite 100  
Centreville, MD 21617

RE: Minor Site Plan #04-07-11-0003-C  
Juleo, LLC

Dear Ms. Clark:

This is a letter to update the first comment (#1) from LGE regarding the 20% forest clearing. The previous comment, "The April 2007 letter, #6, remains to be clarified whether the 20% allows 20% more, which could end up being a total of 47% with the currently proposed 27% clearing, or if the proposed 27% includes what was already cleared," is now replaced with the following:

1. The proposed forest clearing is 27%, which is over the 20% allowed in the CA IDA. Staff understands the applicant's argument and in light of item #6 in the April 2007 letter, has consulted with the Planning Commission Attorney as well as the Zoning Administrator and the Director of Land Use & Zoning. The site plan will be allowed to clear up to 20% of the forest/woodland, but no more.

If you have any questions, or need further information, please do not hesitate to contact the appropriate department.

Sincerely,

Holly A. Tompkins  
Senior Land Use Planner

HAT: bln

cc: Juleo, LLC  
John Nickerson, Environmental Health Department  
Marshall Johnson, Critical Area Commission  
Vijay Kulkarni, Public Works Department

Juleo, LLC #04-07-11-0003-C

February 14, 2008

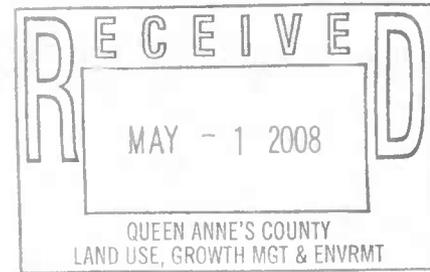
Page 2 of 2

Amanda Apple, Heritage Coordinator  
Nancy Scozzari, Parks & Recreation  
Alan Quimby, Sanitary District  
Allison Howard, Soil Conservation  
Wilbert King, State Highway  
Steve Cohoon, Director Land Use & Zoning  
Chris Drummond, Planning Commission Attorney

S:\Comment Letters - Minor Site Plan\Juleo, LLC -REV#2-(2-14-08).doc

# McCRONE

- Engineering
- Environmental Sciences
- Construction Services
- Land Planning & Surveying



May 1, 2008

Ms. Holly Tompkins  
Queen Anne's County Department of Land Use,  
Growth Management & Environment  
160 Coursevall Drive  
Centreville, MD 21617

**RE: RESUBMITTAL OF MINOR SITE PLAN FOR JULEO, LLC FOR A BOAT SALES AND RETAIL COMMERCIAL BUSINESS, ISLAND PLAZA DRIVE, STEVENSVILLE – MSP #04-07-11-0003-C; McCRONE, INC. JOB #D1050429**

Dear Ms. Tompkins:

We are resubmitting the above referenced project for review and approval. This resubmittal contains the following information:

- 6 copies of this cover letter (DEH, Sanitary, DPW Eng., DPW Roads, CAC, LGE)
- 6 copies of the site plan (DEH, Sanitary, DPW Eng., DPW Roads, CAC, LGE)
- 2 copies of a possible Temporary Construction Easement (DPW Roads, LGE)

In response to comments from various agencies contained in your correspondence to me dated April 23, 2008 on the above referenced project, we offer the following:

**DEPARTMENT OF ENVIRONMENTAL HEALTH:**

1. This proposal must be served by public sewer.

Response: The project is proposed to be served by public sewer.

2. All water lines from one well serving 4 buildings must be located on one parcel and must be adequately protected from backflow/back siphonage risks.

Response: The water services are all located on parcel no. 1. Please refer to note 5 on Sheet 8, which discusses protection from backflow/back siphonage.

**DEPARTMENT OF PUBLIC WORKS:**

**Sanitary District:**

**Plan Review Comments:**

Sheet 8 of 14:

1. May wish to consider placing division valves on each water service (or a valve inside each building) to allow isolation for maintenance.

Response: The applicant appreciates this suggestion and intends to provide valves in the building.

2. Similar consideration on each sewer force main lateral. Note these two comments are not a requirement.

Response: We believe the backflow preventers and ball valves provided in the E-one unit are designed to allow for independent maintenance. The applicant will discuss this issue with the manufacturer during installation.

3. Sewer pressure mains are to be HDPE SDR-11.

Response: The change has been made to the callouts and utility notes on sheets 8 and 9.

Sheet 13 of 14:

1. Show e-one's alarm panel detail, red light for high level alarm required.

Response: Please refer to Note 6 on sheet 8 and the detail on sheet 13.

**Plat Review Comments:**

1. Easement document provided is ok, but will need to be recorded and a copy of the recorded instrument should be submitted to this office.

Response: We will provide this item prior to our request for signature.

**General Comments:**

1. Site holds sufficient sewer allocation for proposed uses.

Response: So noted.

2. We tentatively concur with the water analysis, but will need to review the detailed cost estimates. We are unaware of the February submittal, please provide.

Response: We have provided this information via email on 4/29 and believe this comment has been addressed.

3. Need revised surety (\$10,110 and fee \$1,011).

Response: We will provide these items prior to our request for signature.

**Stormwater Management:**

General Comments:

1. The engineer's estimate has been reviewed and approved.

Response: So noted.

2. Provide surety and inspection fee prior to DPW signature.

Response: We will provide these items prior to our request for signature.

3. Provide SWM completion form and MIA prior to DPW signature.

Response: We will provide these items prior to our request for signature.

4. Critical Area approval is required prior to DPW signature.

Response: The Critical Area Commission continues to comment on tree clearing, but has offered no comments on stormwater management, which suggests they have approved the stormwater management for the site.

5. SCD approval is required prior to DPW signature.

Response: So noted.

**Road:**

General Comments:

1. The construction cost estimate has been approved; however, it should include a 6% inspection fee of \$1,020.

Response: So noted. We will provide the surety and inspection fee with our request for plan signatures.

2. Revise the proposed driveway elevations along Duke Street to show the centerline tie-in to be approximately 13.77 to provide a uniform slope from south to north across the intersection tie-in.

Response: The change has been made to sheet 14.

3. Temporary construction easements will be required to construct the entrance improvements at Duke Street. Please provide verification of the necessary easements prior to final approval.

Response: The applicant believes the curb and gutter work can be completed within our existing Right-of-Way and the right-of-way for Duke Street without encroaching on the adjacent properties. However, when executing the work we find this is not true, we will execute the attached "Temporary Construction Easement" with the property owner(s).

**DEPARTMENT OF LAND USE, GROWTH MANAGEMENT & ENVIRONMENT:**

**General Comments:**

1. As the previous forest clearing has already been addressed and as the proposed 24% clearing is "insofar as possible", the forest planting/mitigation appears to address the previous comments given this particular site. The intent of the IDA forest 20 % is that if there is ANY forest on a site that it will not all be cleared. This site is unique and that has been taken into account. The statement that the total is 34% (the 4% over WOULD require a variance in LDA) is not the most useful argument for the clearing on this site. However, Staff greatly appreciates the efforts the applicant has made to address the forest clearing and planting near the stream and elsewhere on the site.

Response: The redesign efforts have resulted in a reduction of overall tree clearing.

2. On the landscape plan, sheet 10, please revise the labeling of the plantings in the 100' CA as the Buffer Management/Reforestation Shrub Planting Area Plan.

Response: This has been revised.

3. While the proposed development is permitted two (2) freestanding signs, the total combined freestanding sign surface area cannot exceed that which is allowed under Chapter 18:1. (Section 18:1-81.A(10)(a)[1]) The Maximum allowed sign surface area is 250 sq. ft. (Section 18:1-81.A(10)(b)[1]) The plan must be revised with the correct freestanding sign information.

Response: Site notes 14 and 15 on Sheet 1 have been adjusted accordingly.

4. The wall signage information must also be revised to reflect the correct sq. footage being credited from the revised freestanding sign calculations.

Response: Site notes 14 and 15 on Sheet 1 have been adjusted accordingly.

5. Please revise the Critical Area Reforestation schedule with 1 more tree – the total shown is 296.

Response: The schedule has been revised to account for all trees and the shrub quantities have been revised due to a previous error.

6. Please correct the landscape cost estimate information as the critical area reforestation fee in lieu at the top is actually the general planting schedule.

Response: The cost estimate has been revised.

7. Please provide the letters of credit.

Response: We will provide these items prior to our request for signature.

8. Please execute the easement document with Sanitary District.

Response: We will provide this item prior to our request for signature.

9. What's left of the billboard on the property needs to be removed. Please locate this on the plan with a removal note.

Response: Site note 16 as been added Sheet 1, and a callout has been added to Sheet 2.

**CRITICAL AREA COMMISSION – April 24, 2008:**

1. The proposal must comply with the 20% clearing limit of the County Code for IDA as confirmed by the County's response.

Response: The applicant reduced the overall LOD and tree clearing, and the County has accepted the revised development plan that was submitted April 8, 2008. We believe the plan is approvable as submitted.

2. The applicant has submitted plans showing that forest clearing occurred on the site within the Critical Area Buffer during Spring 2007. The applicant requested a permit from the County which was reviewed by Planning & Zoning, as indicated by the response letter from County Planning & Zoning dated June 22, 2006 stating that the clearing was not approved. That letter (attached) informed the

applicant that project approval or a development plan review was required for the proposed tree clearing. Please see COMAR 27.01.09.01.C(7) which requires that local jurisdictions shall expand the Buffer beyond 100 feet to include contiguous, sensitive areas, such as steep slopes, hydric soils, or highly erodible soils, whose development or disturbance may impact streams, wetlands, or other aquatic environments. Under County Code § 14:1-51 and COMAR 27.01.09.01.C(2) new development activities, including clearing of existing natural vegetation, construction of new roads, parking areas or other impervious surfaces are not permitted in the Buffer. A variance to this standard is required for impacts to the Buffer. For further clarification on this subject, please review the March 5, 2007 letter comments 4 through 7 from this office (attached).

Response: The County required clearing of non-jurisdictional trees to occur outside of the 300-foot shore buffer. No other Buffer expansion was required. The wetland crossing was in accordance with a letter of authorization issued by the Maryland Department of Environment. The County has not indicated a variance is necessary. We believe the plan is approvable as submitted.

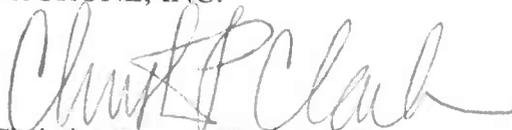
3. It is unclear how County Code § 14:1-37.E(3)(d) requirements were met for the clearing violation that occurred on this site. Please clarify how it was demonstrated to Planning and Zoning that the mitigation requirement could not be met onsite and the fee in lieu could be used and how the violation was rectified based on County Code.

Response: The County accepted the fee. We believe the plan is approvable as submitted.

We believe all outstanding comments have been adequately addressed with this response letter and request minor site plan approval. If you have questions or additional comments, contact me at 410-758-2237.

Sincerely,

McCRONE, INC.

  
Christina Pompa Clark, AICP  
Assistant Branch Manager

abc

pc: Leo Maier, Juleo, LLC

# McCRONE

- Engineering
- Environmental Sciences
- Construction Services
- Land Planning & Surveying

April 9, 2008

Ms. Holly A. Tompkins  
Senior Land Use Planner  
Queen Anne's County  
Dept. of Land Use, Growth Management and Environment  
160 Coursevall Drive  
Centreville, MD 21617



**RE: RESUBMITTAL OF MINOR SITE PLAN FOR JULEO, LLC FOR A BOAT SALES AND RETAIL COMMERCIAL BUSINESS, ISLAND PLAZA DRIVE, STEVENSVILLE – MISP #04-07-11-0003-C; McCRONE, INC. JOB #D1050429**

Dear Ms. Tompkins:

We are resubmitting the above referenced project for review and approval. This resubmittal contains the following information:

- 7 copies of this cover letter (DEH, Sanitary, DPW Eng., DPW Roads, CAC, Drummond, LGE)
- 7 copies of the site plan (DEH, Sanitary, DPW Eng., DPW Roads, CAC, Drummond, LGE)
- 4 copies of the revised Stormwater Analysis (DPW Eng, DPW Roads, CAC, LGE)
- 1 copy of the signage details (LGE)
- 4 copies of the utility easement documents (Sanitary [2], DPW Eng., LGE)
- 7 copies of the overall site and grading plan (DEH, Sanitary, DPW Eng., DPW Roads, CAC, Drummond, LGE)
- 3 copies of the tree clearing plan (CAC, Drummond, LGE)
- 2 copies of site photographs (CAC, LGE)
- 2 copies of the Groundwater Appropriation Permit (LGE, DEH)
- 2 copies of the sewer cost estimate (Sanitary, LGE)
- 2 copies of the road cost estimate (DPW Roads, LGE)
- 2 copies of a landscaping cost estimate (CAC, LGE)
- 2 copies of a fee-in-lieu of reforestation cost estimate (CAC, LGE)

The most significant revision we have made was to revise the site layout and underground utilities to reduce the limit of disturbance and the amount of tree clearing required. We also reduced the area of the stormwater pond slightly to preserve more trees east of Building D.

Since there were not outstanding stormwater comments, the only change to the stormwater report was to update the quantity and quality management calculations for the reduced pond size.

In response to comments from various agencies contained in your correspondence to me dated February 13, 2008 on the above referenced project, we offer the following:

**DEPARTMENT OF ENVIRONMENTAL HEALTH:**

1. This proposal must be served by public sewer.

Response: The project is proposed to be served by public sewer.

2. A Groundwater Appropriation Permit from the Maryland Department of the Environment is needed for the proposed use.

Response: The GAP application was submitted to John Scarborough and Sam Glover at MDE on March 6, 2008. A copy of the application is attached.

3. Water lines from one well serving 4 buildings must be located on one parcel and must be adequately protected from backflow/back siphonage risks.

Response: The water services are all located on parcel no. 1. Please refer to note 5 on Sheet 8, which discusses protection from backflow/back siphonage.

**DEPARTMENT OF PUBLIC WORKS:**

**Sanitary District:**

**Plan Review Comments:**

1. Sheet 8 of 13: Suggest at least 1-inch water lines for all buildings. Utility notes (all pages) – PVC to be scheduled 40 – HPDE to be SDR 7.

Response: The water lines to the buildings are now shown as 1" diameter, minimum. In the utility notes, all PVC is shown to be Schedule 40 (as opposed to just the gravity lines) and all HDPE is shown to be SDR-7. Please refer to the utility notes.

2. Sheet 9 of 13: Provide combination cleanout/vent at 20 feet from valve pit on service. Note cleanout as "End of County Maintenance". Show easement around valve pit.

Response: The vent has been replaced with a combination cleanout/vent. The connection from this cleanout/vent is to be made directly adjacent to the

HDPE/PVC coupling in the line, which is located approximately 10' from the valve pit. Please refer to the details on sheet 13.

3. Sheet 13 of 13: Provide detail of SDR to PVC coupling (refer to recent Benckovich job). Replace the vent detail and cleanout detail with cleanout/vent combination detail. Show grinder pumps having high-level alarm lights.

Response: The detail for the coupling has been added to sheet 13. The vent and cleanout details have been replaced by the vent/cleanout detail. Finally, the correct grinder pump detail has been added to the plan. Previously, the e/One 2000 series grinder pump details were shown on the detail sheet while the DH series was specified on the plan; now details for the DH series are shown, including an in-tank detail showing the pump and alarm level for the tank.

General Comments:

1. Site holds sufficient sewer allocation for proposed uses.

Response: So noted.

2. We tentatively concur with the water analysis but will need to review the detailed cost estimate.

Response: We assume the detailed const analysis to which you refer is the one we submitted in January. Please contact us ASAP if you require any additional information.

3. Need revised estimate, surety, and fee. Only County maintained components needed (i.e. not grinder pumps, etc.).

Response: A revised cost estimate is attached.

Stormwater Management:

General Comments:

1. The engineer's estimate has been reviewed and approved.

Response: So noted.

2. Provide surety and inspection fee prior to DPW signature.

Response: We will provide these items prior to our request for signature.

3. Provide SWM completion form and MIA prior to DPW signature.

Response: We will provide these items prior to our request for signature.

4. Critical Area approval is required prior to DPW signature.

Response: So noted.

5. A copy of the previous wetland permit for the previous road work has been submitted. However, please clarify if further modification is required for the SWM pond outfall or any other work proposed under the subject project.

Response: No additional disturbance to wetlands or their 25' buffers is required for the proposed improvements.

6. SCD approval is required prior to DPW signature.

Response: So noted.

**Road:**

**General Comments:**

1. The current commercial entrance, at Duke Street, to the shopping center does not meet the minimum design criteria for commercial entrances. With the proposed increased usage of this entrance associated with boat sales and retail, the entrance at Duke Street will need to be improved to meet current County standards. The minimum entrance width for commercial properties is 35-feet; however, considering the site restraints and anticipated uses, the County will consider a minimum width of 24-feet. The design should incorporate the maximum fillet radii possible (minimum 20-foot preferred). The entrance fillets should be 8-inch curb and gutter in accordance with the County paving standards for bituminous concrete.

Response: We have met with DPW staff to determine an acceptable geometry for the road and curb improvements. Please refer to Sheet 14.

2. We recommend that the remaining portion of the entrance way from Duke Street to the site access be improved to 24-feet wide to match the existing road section as recently constructed on project site to accommodate two way vehicle access and adequate width for emergency vehicle access.

Response: See previous response.

3. Provide an engineer's construction cost estimate for work within the right-of-way including bond and inspection fee prior to DPW signature.

Response: A cost estimate is included with this submittal.

**SOIL CONSERVATION SERVICE:**

**Sediment and Erosion:**

Plan Review Comments:

1. Provide the name, address and phone number of contractor.

Response: The contractor has yet to be named by the developer. When one is named, their name, address, and phone number will be provided to SCS.

2. Provide drainage area maps showing the maximum drainage that can travel to each sediment trapping device. Include existing and proposed drainage patterns.

Response: Drainage area lines have been added to sheets 5 and 6 of the plan set, denoting the specific areas draining to cells 1 and 2 of the sediment basin/pond system.

3. Include an entrance to the stockpile.

Response: Entrances to the stockpiles had been provided in the previous submittal, but are clarified with a callout on this submittal.

4. Add construction of the SWM facility to the phase of construction.

Response: The SWM facility is intended to be constructed as a sediment trap then converted to a SWM pond upon completion of building and site construction. The construction sequence has been clarified to show that the sediment trap operates as a SWM facility as well.

5. The sequence of construction must include notes on the conversion of the trap/basin to a SWM Pond. Include the statement on the plan that "Conversion can only take place after all disturbed areas have been permanently stabilized to the satisfaction of the inspection authority and storm drains have been flushed".

Response: An additional SWM pond conversion procedure has been added to sheet 12 of 13, and is referenced in the sequence of construction.

**CRITICAL AREA COMMISSION:**

In response to comments from the Critical Area Commission contained in your correspondence to me dated February 26, 2008 on the above referenced project, we offer the following:

1. The proposed forest clearing appears to exceed the 20% allowed in the IDA. Please have the applicant revise the plans to comply with the clearing allowance of the County Code for IDA.

**Response:** Let us first examine the County forest clearing regulations that pertain to sites with a Critical Area Land Use classification of Limited Development Area (LDA). In the LDA, impact from development is mitigated through the 15% limit on impervious surface and by rigorous forest clearing standards. §14:1-38.D.(6) of the County Code identifies that no more than 20% of a forested or developed woodland area may be removed. Mitigation for clearing up to 20% of the forest or developed woodland is set at 1:1. An applicant can further clear an additional 10% of the forest or developed woodland as long as mitigation is set at 1:1.5. Any clearing beyond 30% must first receive a variance by the Queen Anne's County Board of Appeals.

The IDA is a more permissive land use classification than LDA. Impact from development is mitigated through the 10% stormwater management rule. The language in the County Code pertaining to forest clearing in the IDA is permissive. §14:1-37(E)(3)(a) of the County Code states that "the clearing or cutting of forest or developed woodland for development or redevelopment shall provide insofar as possible that no more than 20% of the forest or woodland is removed" (emphasis added). It is our belief that "insofar as possible" is not mandatory language. It permits the County to allow greater than 20% clearing in the Critical Area IDA when justified or necessary. This property is an unusual case. I still know of no other property in the County this size that is zoned Urban Commercial, has a Critical Area land use classification of IDA, and is wooded. The applicant is not trying to maximize the floor area and impervious surface that is allowed under the Urban Commercial zoning district. Instead, a modestly scaled project is proposed that will utilize only approximately 4% of the allowable floor area and approximately 29% of the total impervious surface allowed.

We have taken steps to reduce the tree clearing by redesigning the project. We revised the site layout, underground utilities, and reduced the area of the stormwater pond slightly to reduce the limit of disturbance and the amount of tree clearing required. We have reduced the tree clearing associated with the site plan from 27% to 24%. The 2007 tree clearing for the driveway was 10%. When you add the two areas of clearing, the total

clearing for the site equals 34%. This is only 4% above the amount of clearing permitted in the LDA without the need for a variance – and this site is IDA.

Not only have we reduced the proposed tree clearing, we have increased the amount of on-site mitigation that is proposed and reduced the mitigation to be provided via fee-in-lieu. Total on-site mitigation is 140 trees and 785 shrubs or a total of 297 trees (5 shrubs = 1 tree). We have surveyed the area of phragmites near Thompson Creek to establish an edge of developed woodland. The applicant has been voluntarily eradicating the phragmites (via Queen Anne's County Weed Control) since 2006, which will allow us to use this previous area of phragmites for Critical Area woodland mitigation. Because the elevation is low in this area and not suitable for trees, our licensed landscape architect has selected six shrub species that she believes will do well in this area. They are button bush, high bush blueberry, arrowwood viburnum, summersweet, wax myrtle, and bay berry. A total of 785 shrubs are proposed in this area. With every five shrubs being the equivalent of one tree, this accounts for 157 trees. The majority of these shrubs are proposed in the 100-foot Critical Area Buffer and will enhance the function of the Buffer and the wetland area.

We have eliminated the mitigation trees that were previously proposed in the boat storage areas because this is really a marginal area for tree survivability. We anticipate the gravel may shift and boats may simply plow down the trees.

We believe that with the reduction in the proposed clearing, the enhanced on-site mitigation plan, and the permissive language in the IDA section of the County Code pertaining to tree clearing, that the applicant has met the requirements.

2. It is not clear whether the tree clearing referred to in the November 15, 2007 letter from McCrone, Inc. that already occurred on this site, took place within the expanded Critical Area Buffer. County Code requirements of § 14:1-51 (Buffer standards and requirements) states that development activities, including clearing of existing natural vegetation, construction of new roads, parking areas or other impervious surfaces are not permitted in the Critical Area Buffer. Please have the applicant show the location of the clearing referenced, and explain whether it occurred in the expanded Critical Area Buffer. If necessary, the applicant should address the requirements of § 14:1-51 and propose appropriate mitigation for any disturbance to the Expanded Buffer.

Response: The driveway construction plans were approved by the county Department of Public Works and did not require site plan review by LGE Staff

(Planning and Zoning, at that time) because the plan simply allowed access to the western portion of the property and involved no building construction. According to §14:1-52, expanding the Critical Area Buffer to include hydric soils is optional, based on a determination by the Planning Commission. Since Planning Commission review of the driveway plan was not required, no expansion of the Critical Area Buffer was mandated. Moreover, the location of the disturbance is roughly 475 feet from Thompson Creek, in a relatively narrow flow channel, and in Pineyneck soils, which are not hydric. It is reasonable that county staff would not protect this area with an expanded Critical Area Buffer, considering it is already regulated by MDE and the USACE through the wetland permit process. This is supported by the fact that no site plan review occurred after above-referenced Critical Area Commission letter dated March 5, 2007. A fee-in-lieu of \$3,920.00 for the driveway impact to developed woodland resources was already paid to and accepted by the County.

3. Letter of Authorization 200661791/06-NT-2020 explains that its authorization does not include infringement of State or local laws or regulations, nor does it obviate required authorizations or approvals from State or local agencies. Based on County Code § 14:1-51, it appears that new development activity, including any of the work related to the Authorization No. 200661791/06-NT-2020, is not permitted in the Critical Area Buffer unless a variance for Buffer impacts has been approved and mitigation has been provided. No further development should occur on this site prior to approval of a variance for the impacts of the road on the Buffer. Please note that in the previous letter dated March 5, 2007, this office recommended the County deny approval of the road and any associated grading permit until appropriate site plan review could occur.

Response: The driveway construction plans were approved by the county Department of Public Works and did not require site plan review by LGE Staff (Planning and Zoning, at that time) because the plan simply allowed access to the western portion of the property and involved no building construction. According to § 14:1-52, expanding the Critical Area Buffer to include hydric soils is optional, based on a determination by the Planning Commission. Since Planning Commission review of the driveway plan was not required, no expansion of the Critical Area Buffer was mandated. Moreover, the location of the disturbance is roughly 475 feet from Thompson Creek, in a relatively narrow flow channel, and in Pineyneck soils, which are not hydric. It is reasonable that county staff would not protect this area with an expanded Critical Area Buffer, considering it is already regulated by MDE and the USACE through the wetland permit process. This is supported by the fact that no site plan review occurred after above-referenced Critical Area Commission letter dated March 5, 2007. We therefore do not believe that a retroactive buffer variance is

required in this instance, and that no delay in minor site plan approval is warranted.

4. It appears that the County has approved a proposal by the applicant in the form of a letter dated April 5, 2007 by Michael R. Foster and signed by County Attorney and Zoning Administrator allowing the applicant to mitigate for clearing on the site by payment in lieu of \$3920. County Code § 14:1-37.E(3)(d) requires the fee in lieu equal the total cost of replacing the cleared forest land, and the applicant must demonstrate to the satisfaction of the Planning and Zoning Office that mitigation requirements, on-site or off-site, cannot be reasonably accomplished. Please clarify how it was demonstrated that the fee in lieu could be used, how the fee was determined, and what clearing the agreed upon "112 trees x \$35" would be replacing.

Response: The County accepted the fee. It seems this issue is closed.

**DEPARTMENT OF LAND USE, GROWTH MANAGEMENT & ENVIRONMENT:**

**General Comments:**

1. Revised 2/14/08: The proposed forest clearing is 27%, which is over the 20% allowed in the CA IDA. Staff understands the applicant's argument and in light of item #6 in the April 2007 letter, has consulted with the Planning Commission Attorney as well as the Zoning Administrator and the Director of Land Use & Zoning. The site plan will be allowed to clear up to 20% of the forest /woodland, but no more.

Response: Let us first examine the County forest clearing regulations that pertain to sites with a Critical Area Land Use classification of Limited Development Area (LDA). In the LDA, impact from development is mitigated through the 15% limit on impervious surface and by rigorous forest clearing standards. §14:1-38.D.(6) of the County Code identifies that no more than 20% of a forested or developed woodland area may be removed. Mitigation for clearing up to 20% of the forest or developed woodland is set at 1:1. An applicant can further clear an additional 10% of the forest or developed woodland as long as mitigation is set at 1:1.5. Any clearing beyond 30% must first receive a variance by the Queen Anne's County Board of Appeals.

The IDA is a more permissive land use classification than LDA. Impact from development is mitigated through the 10% stormwater management rule. The language in the County Code pertaining to forest clearing in the IDA is permissive. §14:1-37(E)(3)(a) of the County Code states that "the clearing or cutting of forest or developed woodland for development or redevelopment shall provide insofar as possible that no more than 20% of

the forest or woodland is removed" (emphasis added). It is our belief that "insofar as possible" is not mandatory language. It permits the County to allow greater than 20% clearing in the Critical Area IDA when justified or necessary. This property is an unusual case. I still know of no other property in the County this size that is zoned Urban Commercial, has a Critical Area land use classification of IDA, and is wooded. The applicant is not trying to maximize the floor area and impervious surface that is allowed under the Urban Commercial zoning district. Instead, a modestly scaled project is proposed that will utilize only approximately 4% of the allowable floor area and approximately 29% of the total impervious surface allowed.

We have taken steps to reduce the tree clearing by redesigning the project. We revised the site layout, underground utilities, and reduced the area of the stormwater pond slightly to reduce the limit of disturbance and the amount of tree clearing required. We have reduced the tree clearing associated with the site plan from 27% to 24%. The 2007 tree clearing for the driveway was 10%. When you add the two areas of clearing, the total clearing for the site equals 34%. This is only 4% above the amount of clearing permitted in the LDA without the need for a variance – and this site is IDA.

Not only have we reduced the proposed tree clearing, we have increased the amount of on-site mitigation that is proposed and reduced the mitigation to be provided via fee-in-lieu. Total on-site mitigation is 140 trees and 785 shrubs or a total of 297 trees (5 shrubs = 1 tree). We have surveyed the area of phragmites near Thompson Creek to establish an edge of developed woodland. The applicant has been voluntarily eradicating the phragmites (via Queen Anne's County Weed Control) since 2006, which will allow us to use this previous area of phragmites for Critical Area woodland mitigation. Because the elevation is low in this area and not suitable for trees, our licensed landscape architect has selected six shrub species that she believes will do well in this area. They are button bush, high bush blueberry, arrowwood viburnum, summersweet, wax myrtle, and bay berry. A total of 785 shrubs are proposed in this area. With every five shrubs being the equivalent of one tree, this accounts for 157 trees. The majority of these shrubs are proposed in the 100-foot Critical Area Buffer and will enhance the function of the Buffer and the wetland area.

We have eliminated the mitigation trees that were previously proposed in the boat storage areas because this is really a marginal area for tree survivability. We anticipate the gravel may shift and boats may simply plow down the trees.

We believe that with the reduction in the proposed clearing, the enhanced on-site mitigation plan, and the permissive language in the IDA section of the County Code pertaining to tree clearing, that the applicant has met the requirements.

2. Please provide a sheet (or show on the existing conditions) that clearly reflects the area where trees were cleared (via hatch marks or some symbol) – per the April 2007 letter.

Response: We have enclosed a separate 11x17 plan showing the 2007 and proposed tree clearing lines.

3. Adjacent property owners are missing from sheet 2 (other than the list).

Response: This information has been added back onto the plan.

4. For the outside storage areas, is the roof not proposed over them, even though it appears so on the architectural drawings?

Response: There is a roof over the storage areas, but no ceiling. This is similar to a walled dumpster enclosure, which is not counted as enclosed floor area.

5. Please clarify the proposed roof line versus the edge of the sidewalk by buildings B and C.

Response: We have added callouts to delineate the proposed roofline on sheets 3 and 4.

6. The architectural plans show second floors. Has this been calculated in the FAR? The APFO exemption permitted up to 7,900 sq. ft.

Response: There is no habitable second floor in any of the four buildings. The architectural sketches show false dormers and windows for stylistic purposes to meet the UC design guidelines. This is a common practice among commercial buildings. The new Safeway building is a good example.

7. It should be clearly stated on the plan that this is a new boat (vehicle) sales/service with exterior storage/display in Note #11.

Response: We have updated Note 11 as requested.

8. Please revise Building B with the correct sq. footage on each sheet necessary.

Response: The area has been revised to 1,061 sf.

9. Please label the area between the gray shaded buildings and the storage areas as "covered display" area.

Response: The label as been added as requested.

10. The sewer hookup information is missing on sheet 3.

Response: Underground utilities are typically not shown on a site plan. This information has been removed from Sheet 4.

11. Please indicate that there is the required amount of space for a loading space where needed as required under Section 18:1-84.E.

Response: The gravel boat display areas double as loading spaces. The parking calculations have been updated accordingly.

12. Thank you for the photos of the existing trees. Please make clear where the pictures are taken from, where was the person standing? Also, there were two "west" views labeled but obviously are not, please clarify.

Response: A key has been added to the sheet for reference. One of the "west" views was taken from a longer angle to show more of the existing road. The photo taken from the shorter angle has been relabeled as "northwest".

13. Are there any isolated trees 6" in diameter? This is from Section 18:1-149.D(5).

Response: There are no isolated trees on this site.

14. Up to two (2) freestanding signs are permitted with surface area totaling up to 250 sq. ft. – Section 18:1-81.A(10)(a).

Response: The client met with LGE staff to discuss signage. Since the frontage is greater than 500', two freestanding signs of 250 sf each are allowed, totaling 500 sf. The four 4-foot high freestanding signs have been removed from the plan, leaving one freestanding sign 9' x 15' x 12" deep sign (135 sf). Please refer to Note 14 on Sheet 1.

15. The wall signage permitted for the proposed use (there is only one use for this site) is up to 60 sq. ft. (not 60sq. ft. per building). Unused freestanding sign area may be transferred for wall sign use – see Section 18:1-81.A(10)(d).

Response: The unused portion of the allowed 500 sq. ft. freestanding sign (365 sq. ft.) can be credited towards the wall signs at a rate of 25%, therefore  $365 \times 0.25 = 91$  sq. ft. credited towards wall signs. The total allowable on-site

square footage for wall signs is  $60 + 91 = 151$  sq. ft. The number and area of wall signs will be determined once leases for the buildings are signed, but shall not exceed an aggregate of 151 sq. ft. Please refer to note 15 on sheet 1. The signage package (8.5-inch by 11-inch sheets) that is submitted herewith shows a total of 153.2 sq. ft. for wall signage and is for pictorial purposes only. Actual wall signage area on site will not exceed 151 sq. ft.

16. What is the proposed height of the 6 shown parking lot lights? What lighting is proposed for the buildings?

Response: As shown in the Lighting Schedule, the fixtures are 20' high. Building lighting will consist of downward directed lights in the porch ceilings at each building entrance and low voltage landscape lighting to illuminate the sidewalks at the front of the buildings.

17. Please provide one sheet that is the overall proposed site plan.

Response: We have included an overall site and grading plan for your information, separate from the construction plans.

We believe all outstanding comments have been adequately addressed with this response letter. If you have questions or additional comments, contact me at 410-758-2237.

Sincerely,

McCRONE, INC.



Christina Pompa Clark, AICP  
Assistant Branch Manager

abc

pc: Leo Maier, Juleo, LLC

# McCCRONE

- Engineering
- Environmental Sciences
- Construction Services
- Land Planning & Surveying



January 18, 2008

Ms. Holly A. Tompkins  
Senior Land Use Planner  
Queen Anne's County  
Dept. of Land Use, Growth Management and Environment  
160 Coursevall Drive  
Centreville, MD 21617

**RE: RESUBMITTAL OF MINOR SITE PLAN FOR JULEO, LLC FOR A BOAT SALES AND RETAIL COMMERCIAL BUSINESS, ISLAND PLAZA DRIVE, STEVENSVILLE – MSP #04-07-11-0003-C; McCCRONE, INC. JOB #D1050429**

Dear Ms. Tompkins:

We are resubmitting the above refereneed project for review and approval. This resubmittal contains the following information:

- 6 copies of this cover letter (DEH, Sanitary, DPW Eng., DPW Roads, CAC, LGE)
- 6 copies of the site plan (DEH, Sanitary, DPW Eng., DPW Roads, CAC, LGE)
- 2 copies of the signed April 5, 2007 violation settlement letter (CAC, LGE)
- 4 copies of the revised drainage area maps (DPW Eng, DPW Roads, CAC, LGE)
- 1 copy (each) of correspondence from the utility companies (LGE)
- 1 copy of the signage details (LGE)
- 1 copy of the lighting cut sheet (LGE)
- 1 copy of photos of existing trees (LGE)
- 3 copies of the nontidal wetland permit (DPW Eng., CAC, LGE)
- 2 copies of the Truck Turning Exhibits (DPW Roads, LGE)
- 2 copies of the SWM cost estimate (DPW Eng., LGE)
- 2 copies of the sewer cost estimate (Sanitary, LGE)
- 2 copies of the water and well cost estimates (Sanitary, LGE)

In response to comments from various agencies contained in your correspondence to me dated December 11, 2007 on the above refereneed project, we offer the following:

**DEPARTMENT OF ENVIRONMENTAL HEALTH:**

1. This proposal must be served by public sewer.

Response: The project is proposed to be served by public sewer.

2. A Groundwater Appropriation Permit from the Maryland Department of Environment is needed for the proposed use.

Response: We will apply for a GAP prior to our request for signatures.

3. Water lines from one well serving 4 buildings must be on one parcel and adequately protected from backflow/backsiphonage risks.

Response: The proposed well and all four buildings are proposed to be located on the single existing Parcel No. 1. Please refer to Utility Note #1 on sheet 8 regarding the requirement to protect against backflow/backsiphonage.

**DEPARTMENT OF PUBLIC WORKS:**

**Sanitary District:**

General Comments:

1. Site holds sufficient sewer allocation for the proposed uses.

Response: So noted.

2. We tentatively concur with the water analysis, but will need to review the detailed cost estimates.

Response: Please refer to the enclosed well and water main extension cost estimates, which shows the cost of water main extension to be roughly ten times the well cost.

3. Provide vacuum sewer extension plans for review.

Response: Please refer to Sheets 8, 9 and 13.

4. Provide estimate, surety and fee.

Response: The sewer estimate is enclosed. Surety and fee will be provided prior to our request for plan signatures.

**Stormwater Management:**

**SWM Report Review Comments:**

1. The Zone A6 shown on the drainage area maps of 1 of 3, 2 of 3 and 3 of 3 is shown as Zone C on the construction drawings. Please revise as necessary.

Response: The flood plain zone designations have been removed from the drainage area maps since this is not relevant information. New copies of the maps are enclosed that supersede the previous versions. No changes were required to the Stormwater Analysis.

**General Comments:**

1. Provide engineer's estimate prior to DPW signature.

Response: A stormwater management cost estimate has been enclosed with the submittal package.

2. Provide surety and inspection fee after the estimate is approved.

Response: The surety and inspection fee will be submitted simultaneously with our request for DPW signature on the site plan set.

3. Provide SWM completion form and MIA prior to DPW signature.

Response: The SWM completion form and MIA will be submitted simultaneously with our request for DPW signature on the site plan set.

4. Critical Area approval and Wetland permit are required prior to DPW signature.

Response: A nontidal wetland permit was previously issued by MDE for this project prior to driveway construction. A copy of the permit is included herewith.

5. SCD approval is required prior to DPW signature.

Response: So noted.

**Roads:**

**General Comments:**

1. Please provide additional topo showing the entrance to the site from Duke Street. Also, please provide a turning radius demonstration from Duke Street unto Island Plaza Drive for large boat trailers and tractor trailers.

Response: We have included pictures of the intersection and provided an autoturn analysis based on a WB-55. The most challenging movement is right turns from Duke Street to Island Plaza drive, since this movement is greater than a 90-degree turn. The analysis shows that the wheel track of the trailer falls slightly outside of the edge of pavement, however, this area is grassed and there are no obstructions that could be damaged. Since this vehicle size is slightly larger than the usual trailer utilized for boat deliveries, and considering the low traffic volume of these oversized vehicles, we do not believe that pavement upgrades are necessary to this intersection.

**CRITICAL AREA COMMISSION:**

1. As stated in the previous letter from this office to Mr. James Barton at the County dated March 5, 2007, a Critical Area violation has occurred on the site and development should not be permitted until it has been resolved. Please provide documentation of the status of the violation explaining how the site has been brought into compliance with the County Critical Area Program regulations. No permits for development on this site should be approved until the violation and additional issues outlined in the March 5, 2007 letter have been resolved, as requirements for compliance may require alteration of the proposal.

Response: A copy of an un-signed settlement letter dated April 5, 2007 was provided in our original submittal. A pdf of the signed settlement letter was emailed to the Critical Area Commission and County on December 28, 2007. We are also including a copy of the signed settlement letter with this resubmittal. We believe, based on the signed settlement agreement, that the issue of the violation is closed. We ask that the Critical Area Commission review the plan set and provide comments.

2. Please note that the 100-foot Critical Area Buffer includes the extent of the non-tidal wetland on the western portion of the site.

Response: The labeling of the Critical Area Buffer has been revised to include the area of nontidal wetlands.

**DEPARTMENT OF LAND USE, GROWTH MANAGEMENT & ENVIRONMENT:**

**General Comments:**

1. Please provide a copy of the signed April 5, 2007 letter along with any other information that the violation has been settled.

Response: The copy of an un-signed settlement letter dated April 5, 2007 was provided in our original submittal. A copy of the signed settlement letter is included with this resubmittal.

2. It is unclear the amount of clearing proposed based on the clearing done previously and that being done via this site plan. The total amount permitted is 20%; however 27% is being shown as proposed clearing. Please clarify beyond that in the cover letter.



Response: Item #6 in the settlement letter dated April 5, 2007 reads as follows:

"The tree clearing to date will not be calculated against or reduce in any way impair the 20% (or greater as may be approved by the Director of Planning & Zoning) tree clearing allowance under §14:1-37(E)(3)."

As a result, the tree clearing numbers assume the area that was previously cleared is not forested or wooded. I will point out that §14:1-37(E)(3)(a) of the County Code states that "the clearing or cutting of forest or developed woodland for development or redevelopment shall provide insofar as possible that no more than 20% of the forest or woodland is removed" (emphasis added). It is our belief that "insofar as possible" is permissive language, which permits the County to allow greater than 20% clearing in the Critical Area IDA when justified or necessary. This property is an unusual case. I still know of no other property in the County this size that is zoned Urban Commercial, has a Critical Area land use classification of IDA, and is wooded. The applicant is not trying to maximize the floor area and impervious surface that is allowed under the Urban Commercial zoning district. Instead, a modestly scaled project is proposed that will utilize only approximately 4% of the allowable floor area and approximately 29% of the total impervious surface allowed. Yes, tree clearing is proposed at 27%, but again, this is a modest increase over the 20% cited in the County Code and the Chief of Land Use has the ability to approve this clearing without the need for a Board of Appeals decision because of the "insofar as possible" clause.

3. Please provide forest / woodland information for the upland portion of the property – at a minimum the calculations.

Response: Upland woodland clearing calculations are now provided. Please note that no clearing is proposed in the upland.

4. How is the acreage for the property arrived at? It is not clear from the Deed, which states that there are/were two parcels. Please clarify.

Response: McCrone, Inc. completed a boundary survey of the property in January 2007. There are two parcels and they are shown on the site plan. Development is proposed on Parcel No. 1 and the site statistics have been revised accordingly.

5. Please provide the telephone and power company letters as soon as possible.

Response: We are including copies of the phone and power letters with this resubmittal, however, we do note that the letters were sent directly to the Department of Land Use with copies to McCrone, Inc. by Delmarva Power on November 30, 2007 and by Verizon on December 5. These letters should already be in your file just as they are in our file.

6. Please correct the scale on sheet 7 to "as shown".

Response: The scale on sheet 7 has been corrected to "as shown".

7. Please show the North arrow on sheets 10 and 11.

Response: North arrows have been added to sheets 10 and 11.

8. Please spell check the Purpose and Intent statement.

Response: Spelling errors in the Purpose and Intent Statement have been corrected.

9. Please add a Note indicating the Section under which this use is permitted in the code.

Response: This is a new requirement that has not previously been requested. According to §18:1-22.B of the County Code, low, medium, and high commercial is permitted in the Urban Commercial Zoning District. The Definitions contained in Appendix A of Chapter 18 of the County Code include retail and boat sales as high and medium commercial uses. Therefore the proposed use is permitted on the site. See note #11 on sheet one of the site plan set.

10. Please revise the CA line on sheet 2 to state that it is the 1000' boundary and that it happens to be IDA.

Response: The Critical Area line is now labeled as "1000-foot Critical Area Boundary (IDA). Please refer to Sheet 2.

11. Please provide dots between the courses/distances for the property boundary.

Response: Deed points have been added.

12. Is there going to be any outside refuse, if so, please show where and provide information on screening.

Response: The intent is to have trash cans and supplies in the storage areas provided for each building. Please note that buildings A, C & D each have two, 5-foot by 25-foot storage closets that do not contain roofs. Building B only has one of these closets. This is enclosed area without a roof for storage of materials and trash cans for each building.

13. Please provide more information on the storage proposed as shown in 7 places throughout the site – is this calculated within the proposed impervious?

Response: Buildings A, C & D each have two, 5-foot by 25-foot storage closets that do not contain roofs. Building B only has one of these closets. This is enclosed area without a roof for storage of materials and trash cans for each building. These roofless storage areas are not part of the floor area but are included in the total proposed impervious surface.

14. What does the 7,777 sq ft of FAR include?

Response: We have revised the square footage of building B to 2,061 square feet. With this change, the total proposed floor area is 7,777 square feet as noted on sheet 1 of the site plan set. Please note that buildings A, C & D each have two, 5-foot by 25-foot storage closets that do not contain roofs. Building B only has one of these closets. This is enclosed area without a roof for storage of materials and trash cans for each building. These roofless storage areas are not part of the floor area.

15. Please show the sewer hookup information.

Response: We have shown the sewer infrastructure. See sheets 8 and 9 of the site plan set.

16. Please provide a Note indicating the sewer district serving this site.

Response: Sewer district information has been added to sheet one of the site plan set as note #12.

17. Please provide the R-O-W width for Island Plaza Drive.

Response: The ROW width for Island Plaza Drive has been provided.

18. Please provide additional information regarding the location of the R-O-W easement and locate on the plat.

Response: Consistent with the deed, Parcel No. 1 and Parcel No. 2 have been graphically depicted on the site plan. Development is proposed on Parcel No. 1 and the site statistics have been revised accordingly.

19. Please provide the permitted and proposed building height(s).

Response: This information has been added as site note #13 on sheet 1.

20. Please provide a loading space or describe why one is not provided.

Response: The gravel areas on site provide the loading and unloading areas for large flatbed trailers.

21. Please state the minimum required road frontage and where that exists.

Response: Road frontage requirements are typically a concern for subdivisions. This is a site plan, not a subdivision. The site has 50-feet of frontage on Island Drive.

22. Please provide information on the method of parking space demarcation.

Response: Method of demarcation will be 4-inch white paint. This has been called out on sheet 3.

23. Are the reduced spaces to meet the code requirement with a 1.5' overhang?

Response: The spaces near building A were 16.5-feet in length, but have now been increased to 18-feet. This change does not affect the proposed tree clearing and the impervious surface numbers have been adjusted accordingly.

24. Please show the width of the access road.

Response: The pavement of the access drive is 24 feet and has been labeled accordingly.

25. Please provide more information on the dimension of curbing, and curb cuts to match into the proposed road access point.

Response: There is no curb proposed at the transition from existing pavement to proposed pavement. Curb is only proposed between Buildings B and C and their adjacent parking spaces.

26. Will the pavement be marked with directional signage for both cars and pedestrian information?

Response: We are not intending pavement marking to delineate pedestrian paths. This is a relatively small parking lot and we do not anticipate conflicts between pedestrians and vehicles.

27. Please show a legend for the landscaping sheets.

Response: A legend has been provided with the landscape sheets.

28. Please check the landscape calculations between sheets 1 and 11.

Response: The landscape calculations on Sheet 11 have been reviewed and revised as necessary.

29. Please revise the parking lot landscaping proposed spaces number.

Response: The number of parking spaces and parking lot landscape calculations have been revised.

30. The wrong alternative unit is stated for the onsite landscaping.

Response: The unit number has been revised.

31. Please label the lines on the landscaping sheets.

Response: Lines have been labeled on the landscape sheets.

32. Please provide photographic evidence of the existing trees that are to be credited toward the zoning district buffer.

Response: An exhibit is being provided with this submittal to show the existing trees to be used for the buffer.

33. Please provide dimensions for the landscaping island on sheet 11.

Response: All pavement and islands are dimensioned on sheets 3 and 4.

34. Please revise the plant unit and all calculations under the 50/301 street buffer.

Response: Although code states that Alternative #4 is preferred along Route 50/301, the client requested the proposed alternative be used in order to provide deciduous trees.

35. Are there any isolated trees 6" in diameter?

Response: We are unsure why reference is being made to 6-inch diameter trees. When we located trees on site, every tree located had a diameter of 4-inches or greater at breast height.

36. Please add to the signage Note #10 if a freestanding sign is proposed that it will meet all applicable county regulations.

Response: See note #14 on sheet 1.

37. Please provide information on the plat with façade signage calculations and information.

Response: See note #15 on sheet 1.

38. Please provide further information to the lighting study – it does not describe what kind of lights or where, etc.

Response: The landscape plans have been updated to show the construction information necessary to build the proposed lighting. A cut sheet of the luminaire is included herewith.

39. Please add an Environmental Health signature.

Response: The Department of Environmental Health signature is not required on site plans.

40. Is it possible to reduce the size of the graphics on the pages – and reduce the number of pages? There doesn't seem to be so much information that a smaller graphic would be a problem?

Response: Since this site plan serves as a construction plan set, we believe the scale is necessary for legibility of the contractors using the set. This is one measure employed to ensure the plans are implemented as designed during construction. We understand that more paper is being used, but again, we think it is justified.

41. On sheet 2:

- a. Please give the distance for the short area on the south property line near the bay bridge arrow.

Response: The course and distance has been provided for this line segment.

Ms. Holly Tompkins  
D1050429  
January 18, 2008  
Page 11 of 11

- b. What is the course information outside of the property on the northeast side?

Response: The rogue course and distance has been eliminated.

We believe all outstanding comments have been adequately addressed with this response letter. If you have questions or additional comments, contact me at 410-758-2237.

Sincerely,

McCRONE, INC.



Christina Pompa Clark, AICP  
Assistant Branch Manager

abc

pc: Leo Maier, Juleo, LLC

# McCRONE

- Engineering
- Environmental Sciences
- Construction Services
- Land Planning & Surveying

November 15, 2007

Mr. J. Steven Cohoon  
Chief of Land Use and Zoning  
Queen Anne's County  
Dept. of Land Use, Growth Management and Environment  
160 Coursevall Drive  
Centreville, MD 21617



**RE: SUBMITTAL OF MINOR SITE PLAN FOR JULEO, LLC FOR A BOAT SALES AND RETAIL COMMERCIAL BUSINESS, ISLAND PLAZA DRIVE, STEVENSVILLE – McCRONE, INC. JOB #D1050429**

Dear Mr. Cohoon:

We are submitting the above-referenced minor site plan for Juleo, LLC for a boat sales and retail commercial business at the end of Island Plaza Drive in Stevensville. The property is identified on tax map 56 as parcel 250 and is zoned Urban Commercial (UC). The property is partially located in the Chesapeake Bay Critical Area with a land use classification of Intense Development Area (IDA). The property is 10.941 acres in size.

The proposal is for three boat sales buildings, each with a floor area of 2,058 square feet and for one boat-related retail building with a floor area of 1,600 square feet. Total proposed floor area for the project is 7,777 square feet, which qualifies this project as a minor site plan. Total allowable floor area for this property is 190,644 square feet or 4.376 acres. This project is proposing to utilize only approximately 4% of the allowable floor area. Total allowable impervious surface for this property is 381,288 square feet or 8.753 acres where only 111,473 square feet or 2.550 acres is proposed. This is a total of approximately 29% of the total impervious surface allowed.

This is a unique site because it is Critical Area IDA and the property was not maintained over a 10+ year period. As a result, young trees have grown up across the site. In 2006, survey crews from McCrone, Inc. field located each tree that met or exceeded a four-inch diameter at breast height (DBH) on the Juleo, LLC site within a 5.345-acre area. During this exercise, a total of 1,181 trees were located. This is a total of 1 tree per 197 square feet. Because individual trees were not located across the entire site, we needed to establish a methodology to estimate the total number of trees, particularly in the Critical Area. To arrive at the total area of woodland in the Critical Area, we performed the following calculation:

Total Area in Critical Area	=	9.740 ac or 424,274 sf +/-
Less Area of Phragmites	=	0.413 ac or 17,990 sf +/-
<u>Less Area of Existing Driveway</u>	=	<u>0.999 ac or 43,124 sf +/-</u>
Equals Total Area of Woodland in Critical Area	=	8.328 ac or 362,768 sf +/-

At one tree per 197 square feet, the total number of trees in the Critical Area on site is estimated to be 1,841 trees. A total of 502 trees are proposed to be cleared in the Critical Area, or 27.3% of the trees estimated to be on site in the Critical Area. To mitigate for the tree clearing, we propose to replant 193 trees on site and to pay a fee-in-lieu for the remaining 309 trees.

No disturbance is proposed in the upland portion of the site, therefore we believe the site plan is exempt from providing a forest conservation plan in accordance with Section 18:2-4.A(1) of the Queen Anne's County Code.

In the spring of 2007, a grading permit and Notice of Intent were issued for construction of a driveway extending into the site from the end of Island Plaza Drive. The majority of this work has been completed with the exception of final paving. For this reason, these permits will remain active, and will likely be amended to include the proposed work for this site plan. Disturbance to the wetland resources during the driveway construction was allowed under MDE permit #200661791/06-NT-2020 issued March 8, 2006. No additional wetland impacts are proposed with the proposed site plan. This driveway is treated as an existing condition in this site plan, and its associated tree clearing are treated as an existing condition in the plans and calculations included in this submittal, consistent with an April 5, 2007 resolution letter (attached).

Construction of the driveway included the creation of water quality swales on both sides. Therefore, the existing driveway was and continues to be treated for water quality using the grass channel credit. Stormwater water quality and water quantity management for the proposed buildings and pavement is proposed to be provided by a linear pocket pond with two cells. All stormwater is proposed to be handled as surface flow, so no storm drains are proposed (excluding the driveway culverts). This pond, in combination with the grass channel credit, serves to provide adequate phosphorous removal as shown by the Critical Area 10 Percent Rule calculations.

The site is proposed to be served by a private well. The estimated cost to install the well is \$10,500.00, compared to roughly \$45,000.00 to extend 1,400 lf of 8-inch water main to the site. Since the cost of the water extension is more than four times the cost of the well, private water should be acceptable to the Sanitary District.

We recognize that the site will need to be served by public sewer in the form of a vacuum main. We have explored several options such as upgrading the existing main in Duke Street, or alternate routes through abutting properties. The applicant wishes to garner information on other design aspects from other agencies such as LGE, DPW Roads, the CAC, etc. before choosing a route and investing significant time and effort in construction drawings. For this reason, we have omitted this information from this submittal. After receipt of comments, we will meet with the Sanitary District to plan for sewer service that incorporates all agency comments.

Mr. J. Steven Cohoon  
D1050429  
November 15, 2007  
Page 3

We made an initial submittal of an Adequate Public Facilities Study Exemption request on July 30 and last week we received a verbal indication from the APFO Administrator that the exemption request had been accepted after several submittals of supplementary information.

This submittal contains the following information:

- 11 copies of this cover letter
- 11 copies of the application
- 11 copies of the site plan
- 2 copies of the property deed
- 4 copies of the stormwater management report
- 4 copies of the stormwater management checklist
- 2 copies of the environmental assessment
- 3 copies of nontidal wetland jurisdictional determination
- 1 copy of the colored renderings of the buildings
- 2 copies of the lighting photometric plan
- 2 copies of correspondence addressing the UC Design Guidelines
- 1 copy of April 5, 2007 resolution letter
- 1 copy of correspondence to the utility companies requesting service be extended
- 1 package providing proof of notification to adjoining property owners
- fee check in the amount of \$2,977.63

Please review this site plan application and provide comments as soon as possible. Should you have questions or need additional information, please contact me at 410-758-2237.

Sincerely,

McCRONE, INC.



Christina Pompa Clark, AICP  
Assistant Branch Manager

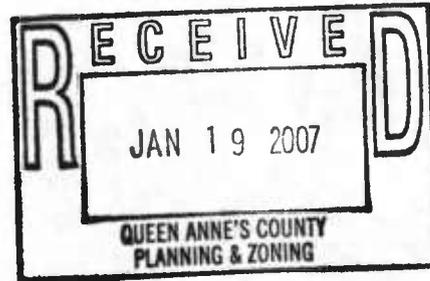
pc: Leo Maier, Juleo, LLC

# McCRONE

- Engineering
- Environmental Sciences
- Construction Services
- Land Planning & Surveying

January 19, 2007

Mr. James Barton  
Queen Anne's County Planning and Zoning  
160 Coursevall Drive  
Centreville, MD 21617



**RE: SUBMITTAL OF SEDIMENT CONTROL PLAN FOR JULEO, LLC, ISLAND PLAZA DRIVE, STEVENSVILLE – McCRONE, INC., JOB #D1060429**

Dear Mr. Barton:

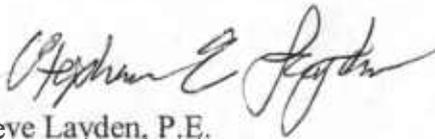
We are submitting a set of driveway plans to the Soil Conservation District and Department of Public Works on behalf of Juleo, LLC for review and approval. Ultimately, when we have signed plans, we will submit the plans to your office with a grading permit application. We believe the Planning Office does not need to review these plans, because no buildings are involved.

Water quality is managed through the grass channel credit and water quantity is not required due to direct discharge to tidal waters. Notes on the plan address stormwater management and calculations for pipe sizing are included.

Please contact me at 410-758-2237 if you have questions or need additional information.

Sincerely,

McCRONE, INC.

  
Steve Layden, P.E.  
Project Engineer

Enclosures

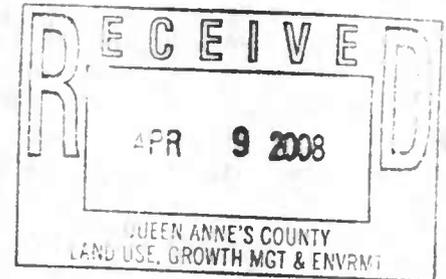
pc: Vijay Kulkarni, DPW  
Tony Riggi, SCD  
Michael R. Foster, Esq.  
Leo Maier, Juleo, LLC

STORMWATER MANAGEMENT ANALYSIS  
FOR  
**JULEO, LLC**  
IN  
**STEVENSVILLE, MD**

PREPARED FOR:  
LEO AND JULIA MAIER  
JULEO, LLC  
2601 CECIL DRIVE  
CHESTER, MD 21619

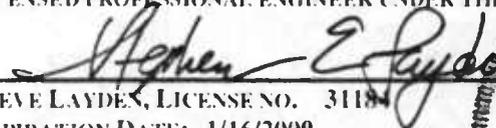
PREPARED BY:  
McCRONE, INC.  
207 N. LIBERTY STREET  
CENTREVILLE, MD 21617

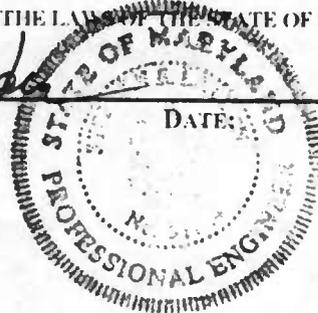
DATE: NOVEMBER, 2007  
REVISED: APRIL, 2008



PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

  
STEVE LAYDEN, LICENSE NO. 3118  
EXPIRATION DATE: 1/16/2009



4/9/08

McCRONE, INC. JOB #D1050429

**McCRONE**

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# STORMWATER MANAGEMENT ANALYSIS

## JULEO, LLC

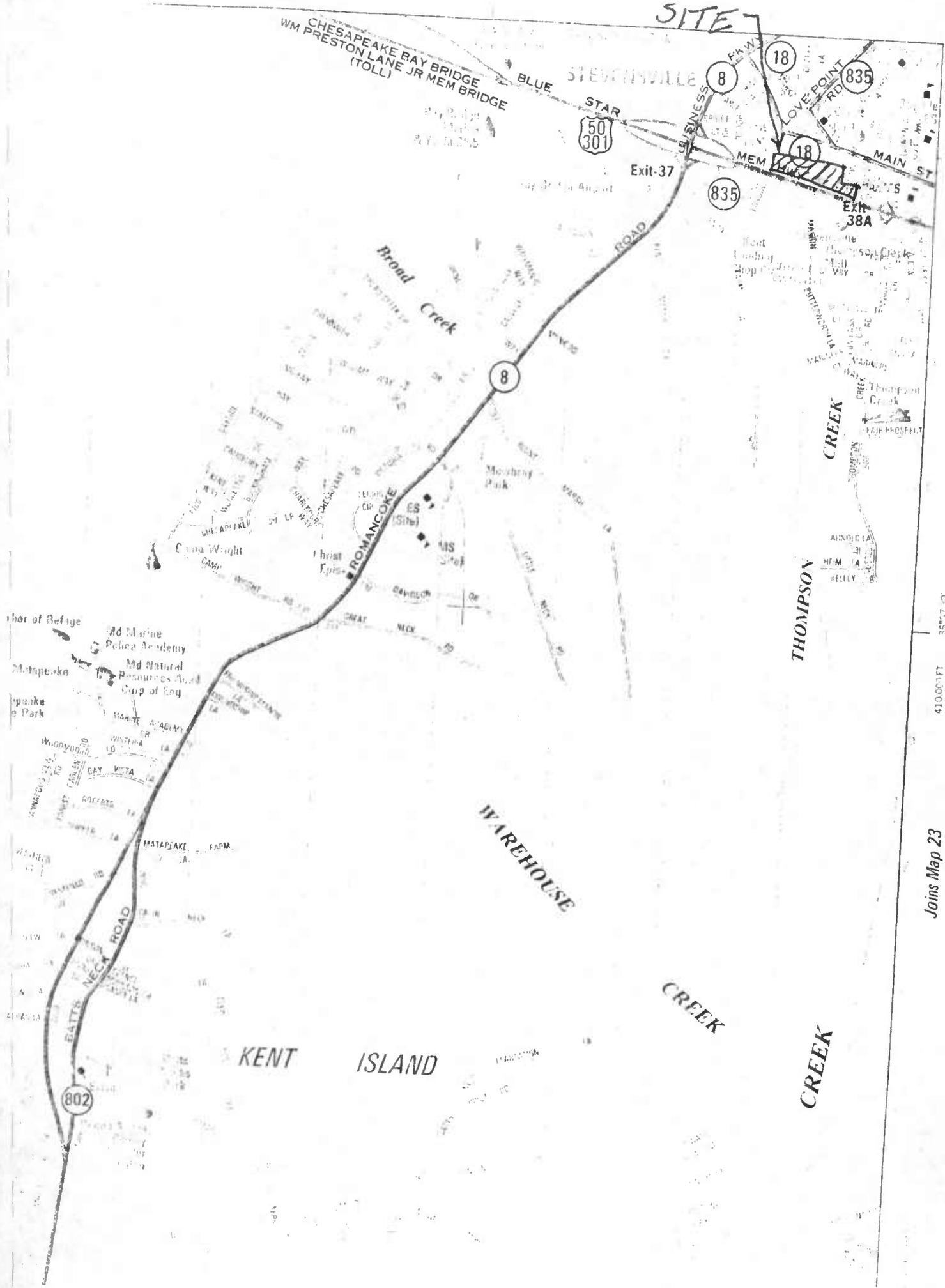
The proposed project consists of the construction of a commercial boat storage and retail space, 6,171 sq. ft. and 1,600 sq. ft. respectively. The project includes a previously constructed access drive as well as proposed bituminous asphalt and gravel parking areas for the site. Stormwater management has been designed for the proposed site and consists of a linear multiple pond. The property is located on one parcel with an area of 10.94 acres at the corner of Island Plaza Road and adjacent to Maryland Route 50 in Stevensville, MD.

The site consists of low-slope topography on hydrologic group B soils. There are two small areas of wetlands on the property. One area of wetlands is located in the western portion of the property, and the other is located on the eastern portion of the property, extending diagonally to the northeast. A small area of permitted disturbance occurred during road construction, but no more wetland disturbance is proposed with this site plan. The existing topography drains in one primary direction toward an existing channel near the western property line. Therefore, one design point was chosen to compare existing and proposed flows as shown on the drainage area maps located in the appendix. A discussion of hydrologic behavior at the design point is as follows:

### Design Point #1

This design point is located in the wetland area on the western end of the site, and it represents flow within the wetland channel. The overall drainage area is relatively the same between existing to proposed conditions, considering that approximately half of the site is not being developed. The majority of drainage off of the developed portion of the site drains into the multiple pond system located along the southern edge of the property. The ponds provide adequate volume for both water quality and stormwater recharge without any additional measures. The pond system contains two cells separated by a control structure (V-notch weir) to maintain the higher water surface elevation in the eastern cell (Cell 1). The ponds do not require a forebay since there are no concentrated inflows; additionally, the gravel parking area and grass buffer adjacent to the pond act as filter strips for sediment-laden runoff. The system outfalls via an outlet pipe and spillway into the wetland buffer on the western edge of the site. There is a small portion of this area whose drainage bypasses the pond system (labeled as proposed DA #3). An existing area of impervious surface is included in this bypass; however, no new impervious surface is proposed and the existing road surface is treated for water quality and recharge using the Grass Channel Credit.

	Existing (cfs)	Proposed (cfs)	Pond Cell 1 Elevation	Pond Cell 2 Elevation
2-Year Storm	1.21	1.06	9.63	6.89
10-Year Storm	3.65	6.67	10.01	7.27
100-Year Storm	6.87	14.35	10.29	7.42



SITE

STAR

Exit-37

835

18

835

18

835

EXIT 38A

8

Broad Creek

ROMANCOKE

CREEK

THOMPSON

WAREHOUSE

CREEK

CREEK

KENT ISLAND

802

410.00 FT

Joins Map 23

KENT ISLAND NW QUADRANGLE  
SHEET NUMBER 30 OF 47

75A

75 1 13





**Subcatchment EX: Ex-Cond**

Runoff = 1.21 cfs @ 12.70 hrs, Volume= 15,497 cf, Depth> 0.80"

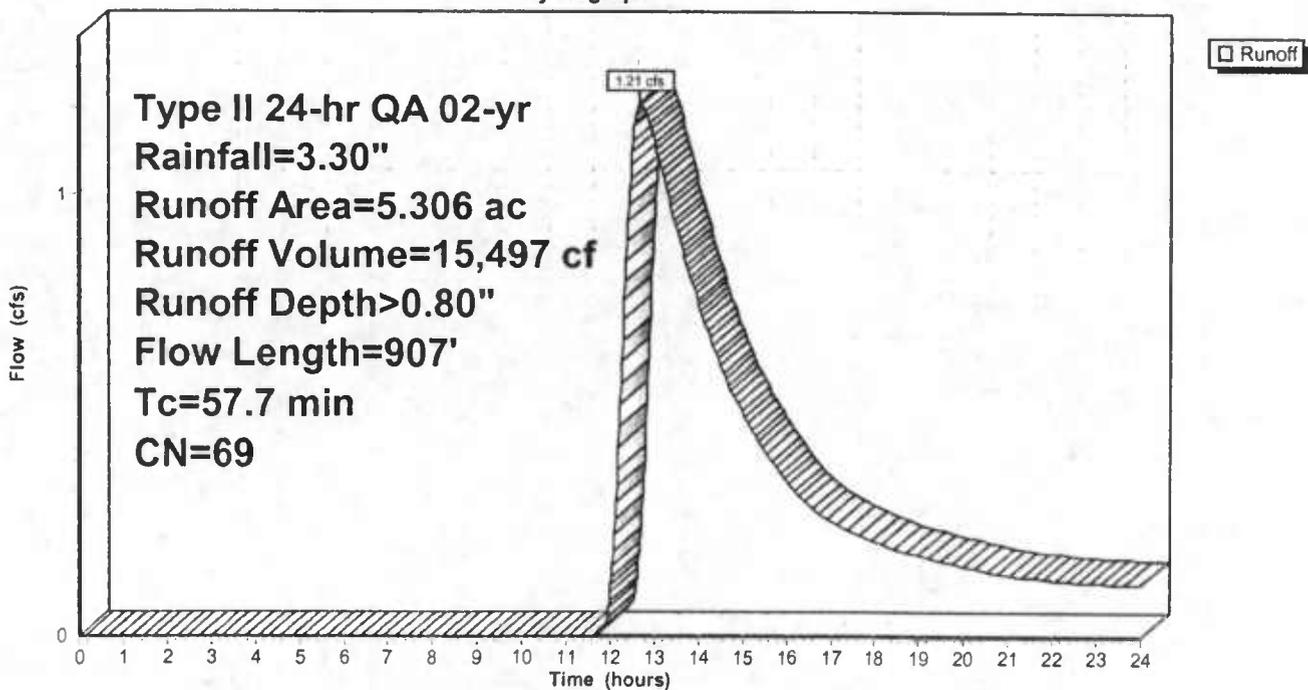
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
 Type II 24-hr QA 02-yr Rainfall=3.30"

Area (ac)	CN	Description
0.421	98	Wetlands
4.885	66	Woods, Poor, HSG B
5.306	69	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.9	142	0.0100	0.06		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
20.8	765	0.0150	0.61		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
57.7	907	Total			

**Subcatchment EX: Ex-Cond**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 10-yr Rainfall=5.30"

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**Subcatchment EX: Ex-Cond**

Runoff = 3.65 cfs @ 12.69 hrs, Volume= 40,670 cf, Depth> 2.11"

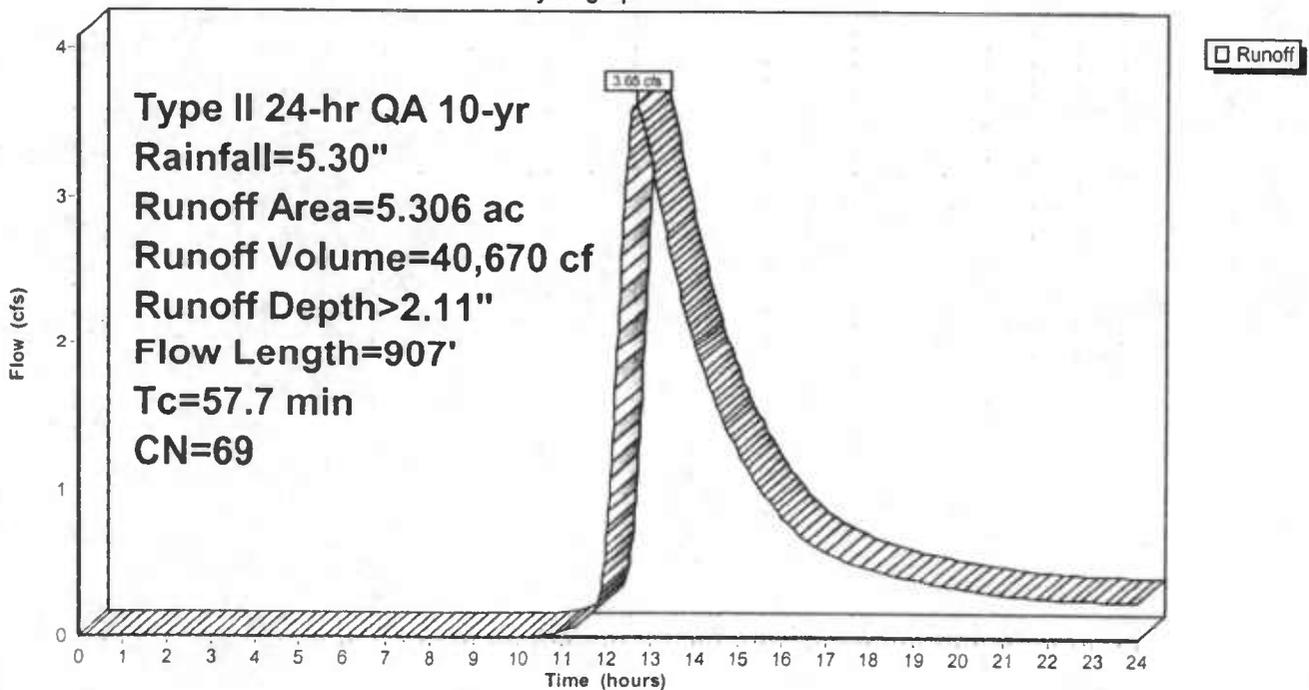
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 10-yr Rainfall=5.30"

Area (ac)	CN	Description
0.421	98	Wetlands
4.885	66	Woods, Poor, HSG B
5.306	69	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.9	142	0.0100	0.06		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
20.8	765	0.0150	0.61		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
57.7	907	Total			

**Subcatchment EX: Ex-Cond**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 100-yr Rainfall=7.50"

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**Subcatchment EX: Ex-Cond**

Runoff = 6.87 cfs @ 12.67 hrs, Volume= 73,618 cf, Depth> 3.82"

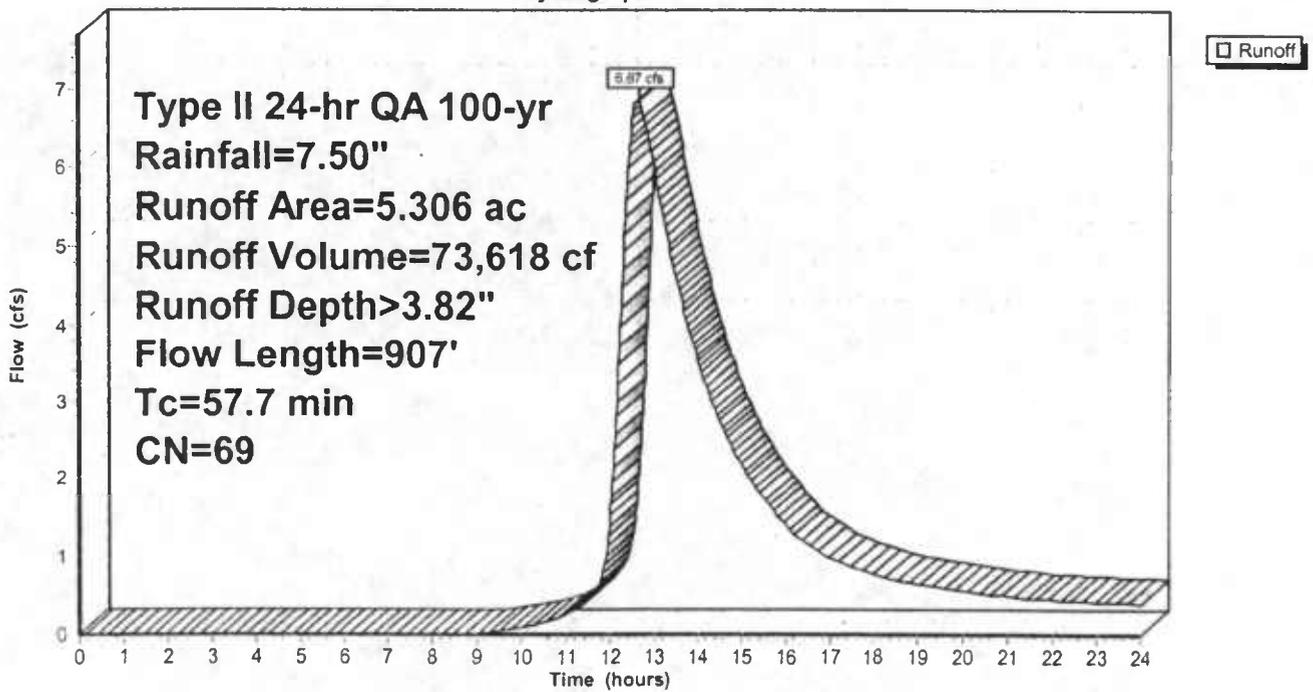
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 100-yr Rainfall=7.50"

Area (ac)	CN	Description
0.421	98	Wetlands
4.885	66	Woods, Poor, HSG B
5.306	69	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.9	142	0.0100	0.06		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
20.8	765	0.0150	0.61		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
57.7	907	Total			

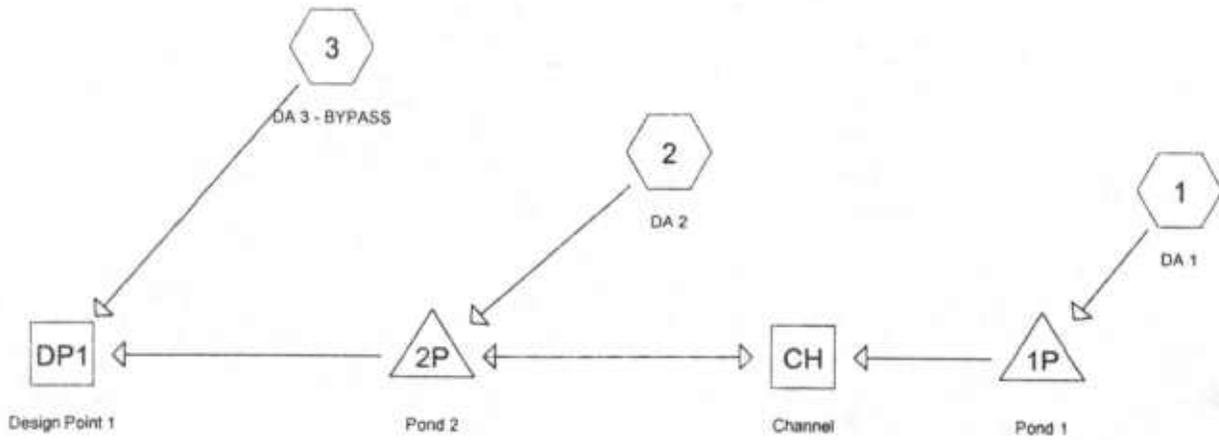
**Subcatchment EX: Ex-Cond**

Hydrograph



# McCRONE

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Drainage Diagram for D1050429-Juleo  
Prepared by McCrone, Inc. 10/22/2007  
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D1050429-GOOD

Type II 24-hr QA 02-yr Rainfall=3.30"

Prepared by McCrone, Inc.

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4/9/2008

### Subcatchment 1: DA 1

Runoff = 2.07 cfs @ 12.03 hrs, Volume= 6,758 cf, Depth> 1.61"

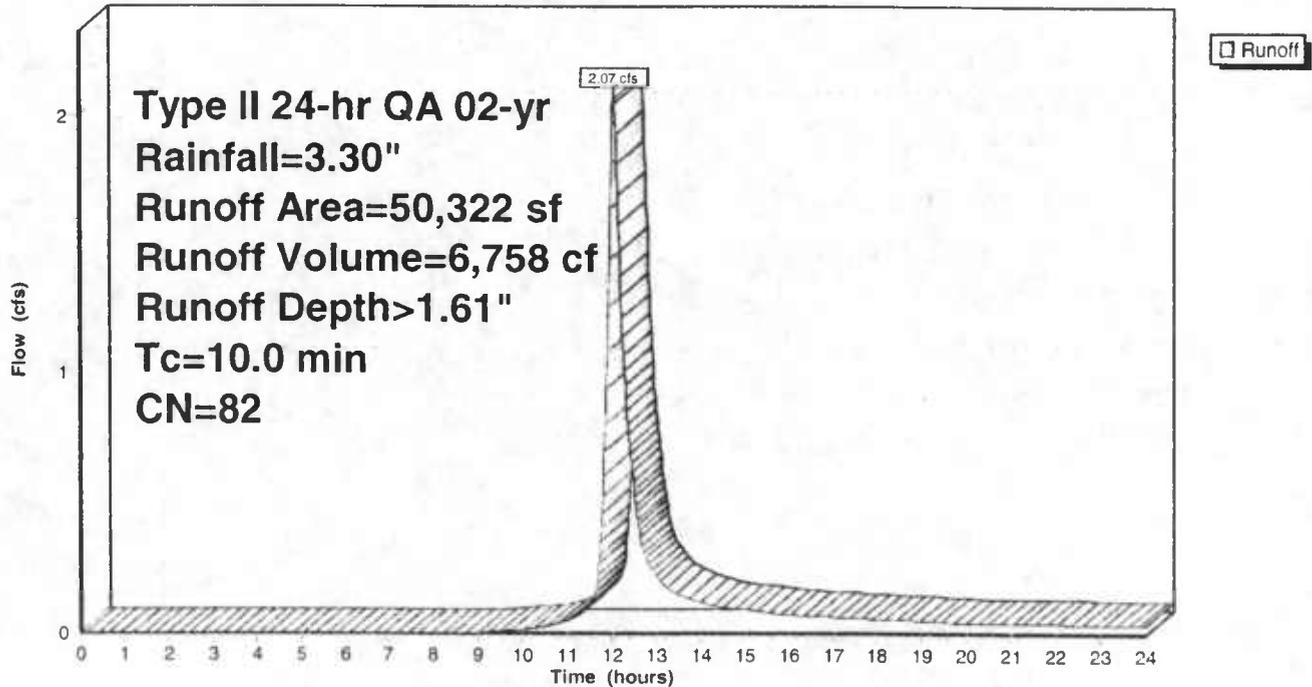
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 02-yr Rainfall=3.30"

Area (sf)	CN	Description
2,496	98	Pond Surface
17,228	95	Gravel Parking
10,274	98	Paved parking & roofs
20,324	61	>75% Grass cover, Good, HSG B
50,322	82	Weighted Average
37,552		Pervious Area
12,770		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, Min Time of Concentration

### Subcatchment 1: DA 1

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 02-yr Rainfall=3.30"

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**Subcatchment 2: DA 2**

Runoff = 3.30 cfs @ 12.03 hrs, Volume= 10,768 cf, Depth> 1.68"

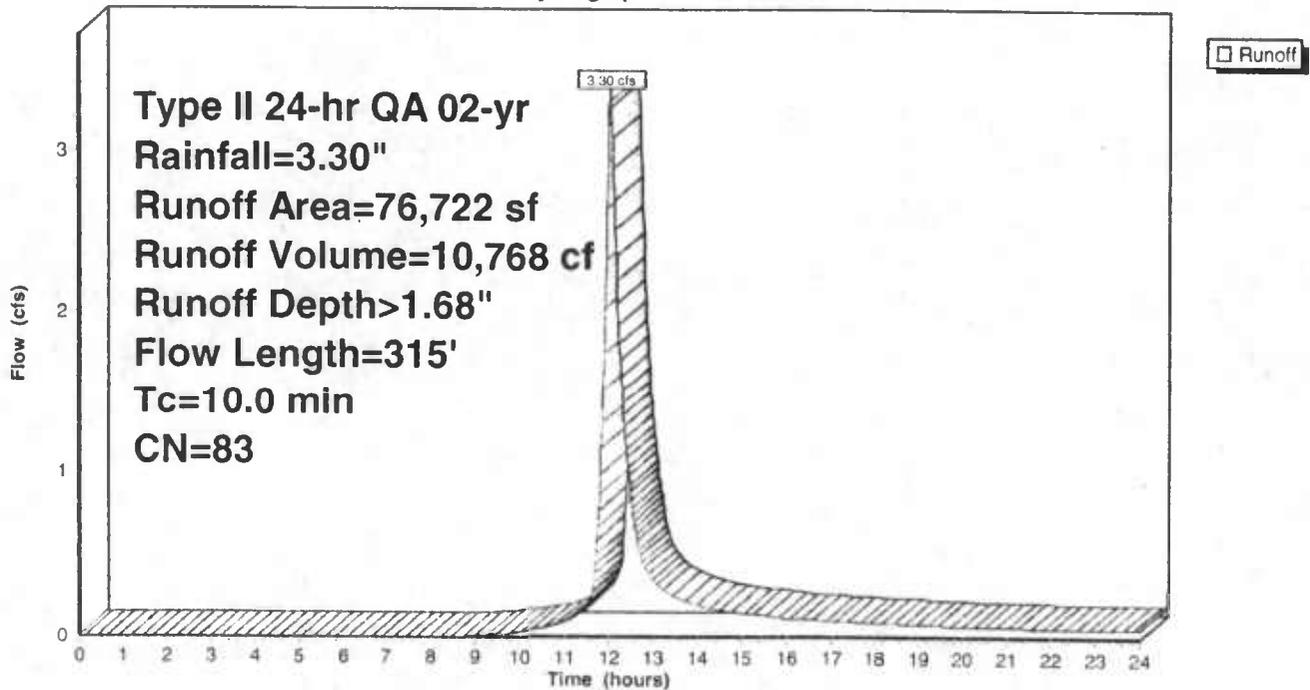
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 02-yr Rainfall=3.30"

Area (sf)	CN	Description
3,114	98	Pond Surface
15,859	95	Gravel Parking
26,968	98	Paved parking & roofs
30,781	61	>75% Grass cover, Good, HSG B
76,722	83	Weighted Average
46,640		Pervious Area
30,082		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	315		0.53		Direct Entry,

**Subcatchment 2: DA 2**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 02-yr Rainfall=3.30"

Prepared by McCrone, Inc.

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**Subcatchment 3: DA 3 - BYPASS**

Runoff = 0.86 cfs @ 12.62 hrs, Volume= 9,310 cf, Depth> 1.13"

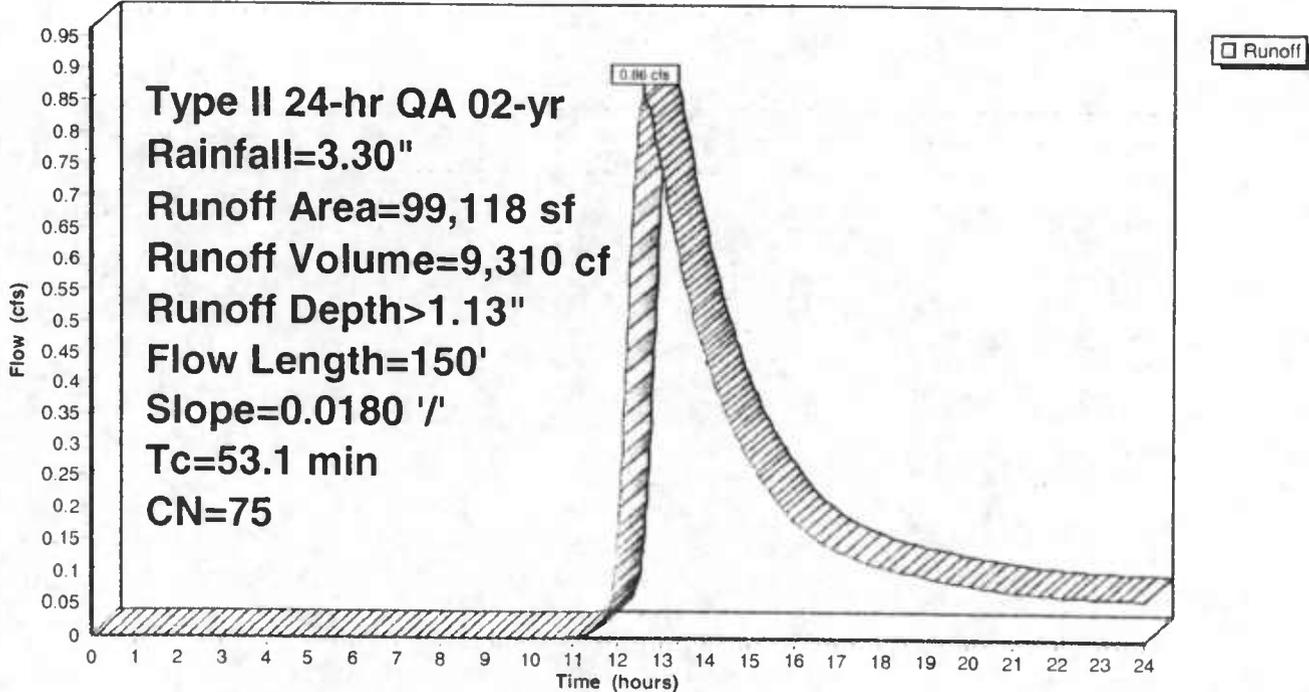
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 02-yr Rainfall=3.30"

Area (sf)	CN	Description
16,688	98	Wetland
60,598	61	>75% Grass cover, Good, HSG B
21,832	98	Paved roads w/curbs & sewers
99,118	75	Weighted Average
60,598		Pervious Area
38,520		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
53.1	150	0.0180	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.30"

**Subcatchment 3: DA 3 - BYPASS**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 02-yr Rainfall=3.30"

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**Reach CH: Channel**

Inflow = 0.80 cfs @ 12.37 hrs, Volume= 6,104 cf  
Outflow = 0.80 cfs @ 12.42 hrs, Volume= 6,089 cf, Atten= 0%, Lag= 2.7 min

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Max. Velocity= 0.97 fps, Min. Travel Time= 3.3 min  
Avg. Velocity = 0.48 fps, Avg. Travel Time= 6.7 min

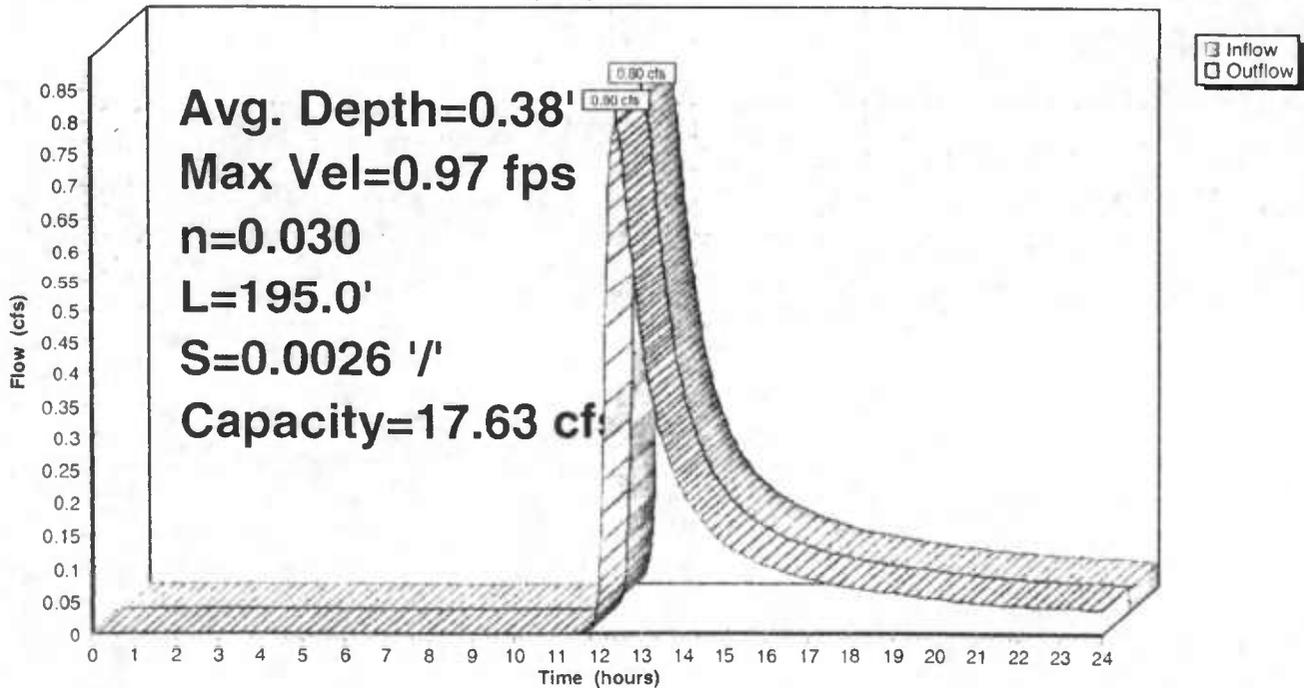
Peak Storage= 161 cf @ 12.42 hrs, Average Depth at Peak Storage= 0.38'  
Bank-Full Depth= 1.50', Capacity at Bank-Full= 17.63 cfs

1.00' x 1.50' deep channel, n= 0.030 Short grass  
Side Slope Z-value= 3.0 '/' Top Width= 10.00'  
Length= 195.0' Slope= 0.0026 '/'  
Inlet Invert= 8.50', Outlet Invert= 8.00'



**Reach CH: Channel**

Hydrograph



**D1050429-GOOD**

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Type II 24-hr QA 02-yr Rainfall=3.30"

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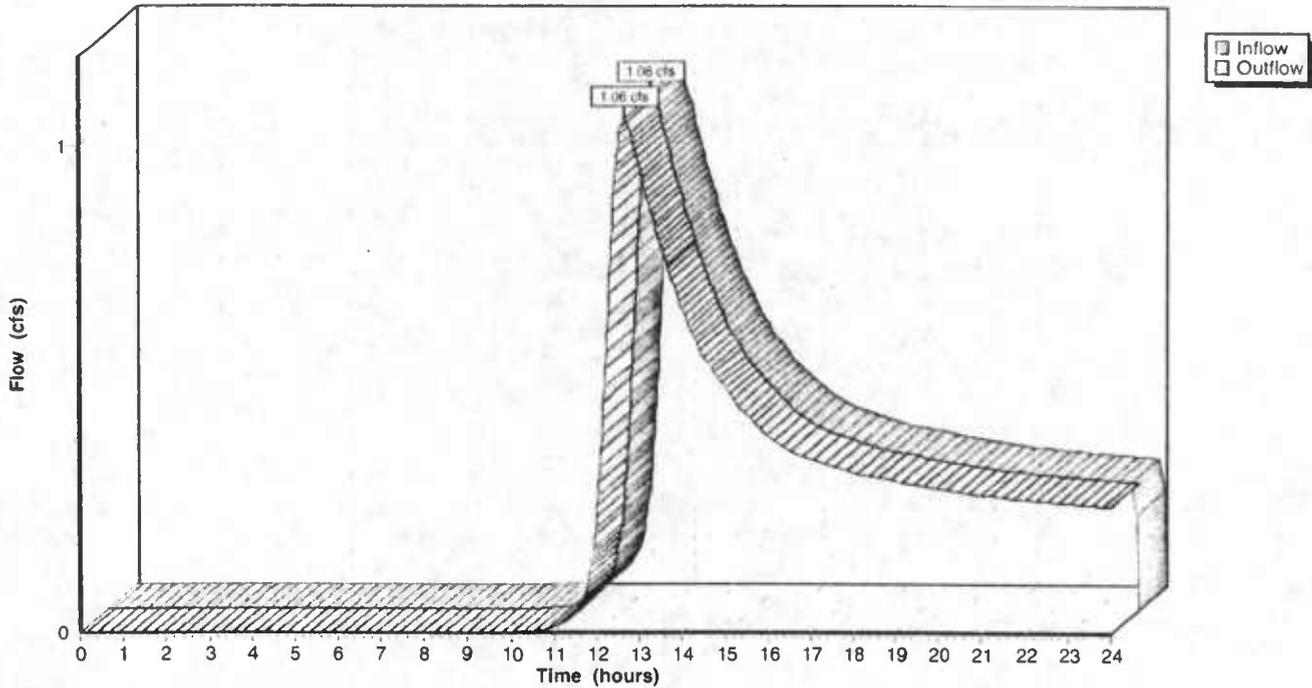
**Reach DP1: Design Point 1**

Inflow = 1.06 cfs @ 12.63 hrs, Volume= 18,793 cf  
Outflow = 1.06 cfs @ 12.65 hrs, Volume= 18,793 cf, Atten= 0%, Lag= 1.2 min

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

**Reach DP1: Design Point 1**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 02-yr Rainfall=3.30"

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**Pond 1P: Pond 1**

Inflow Area = 50,322 sf, Inflow Depth > 1.61" for QA 02-yr event  
 Inflow = 2.07 cfs @ 12.03 hrs, Volume= 6,756 cf  
 Outflow = 0.80 cfs @ 12.37 hrs, Volume= 6,107 cf, Atten= 61%, Lag= 20.2 min  
 Primary = 0.80 cfs @ 12.37 hrs, Volume= 6,107 cf

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
 Peak Elev= 9.63' @ 12.37 hrs Surf.Area= 4,217 sf Storage= 2,393 cf

Plug-Flow detention time= 107.1 min calculated for 6,102 cf (90% of inflow)  
 Center-of-Mass det. time= 59.0 min ( 897.3 - 838.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	9.00'	44,169 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

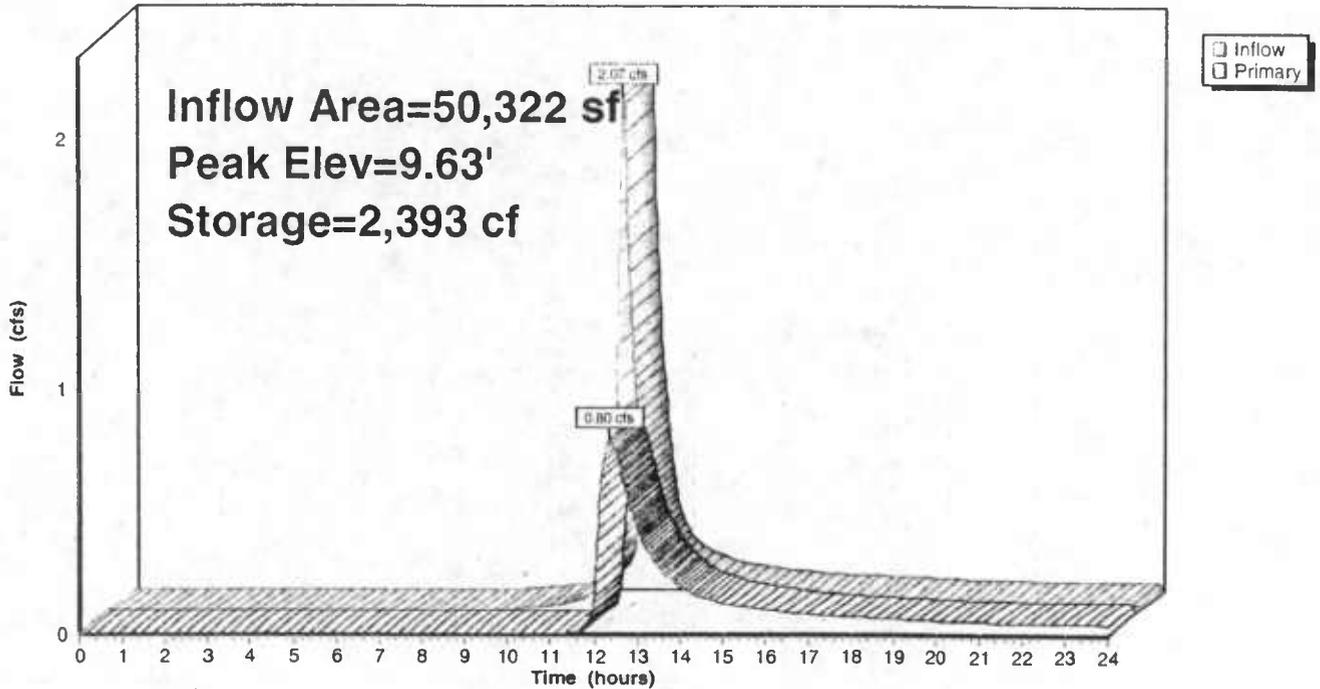
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
9.00	3,323	0	0
10.00	4,732	4,028	4,028
11.00	7,793	6,263	10,290
12.00	19,223	13,508	23,798
13.00	21,519	20,371	44,169

Device	Routing	Invert	Outlet Devices
#1	Primary	9.00'	<b>90.0 deg Sharp-Crested Vee/Trap Weir</b> C= 2.50

**Primary OutFlow** Max=0.80 cfs @ 12.37 hrs HW=9.63' TW=8.88' (Dynamic Tailwater)  
 ↑-1=Sharp-Crested Vee/Trap Weir (Weir Controls 0.80 cfs @ 1.99 fps)

### Pond 1P: Pond 1

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 02-yr Rainfall=3.30"

Prepared by McCrone, Inc.

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**Pond 2P: Pond 2**

Inflow = 3.44 cfs @ 12.04 hrs, Volume= 16,850 cf  
 Outflow = 0.22 cfs @ 15.94 hrs, Volume= 9,502 cf, Atten= 93%, Lag= 233.6 min  
 Primary = 0.22 cfs @ 15.94 hrs, Volume= 9,502 cf

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
 Peak Elev= 6.89' @ 15.94 hrs Surf.Area= 7,381 sf Storage= 9,783 cf

Plug-Flow detention time= 338.0 min calculated for 9,494 cf (56% of inflow)  
 Center-of-Mass det. time= 214.2 min ( 1,073.0 - 858.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	5.00'	18,499 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
5.00	2,944	0	0
6.00	5,297	4,121	4,121
7.00	7,630	6,464	10,584
8.00	8,200	7,915	18,499

Device	Routing	Invert	Outlet Devices
#1	Primary	5.00'	<b>3.0" x 23.2' long Culvert</b> RCP, end-section conforming to fill, Ke= 0.500 Outlet Invert= 4.65' S= 0.0151 '/' Cc= 0.900 n= 0.013
#2	Primary	7.10'	<b>27.0' long x 3.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

**Primary OutFlow** Max=0.22 cfs @ 15.94 hrs HW=6.89' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Barrel Controls 0.22 cfs @ 4.58 fps)
- 2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

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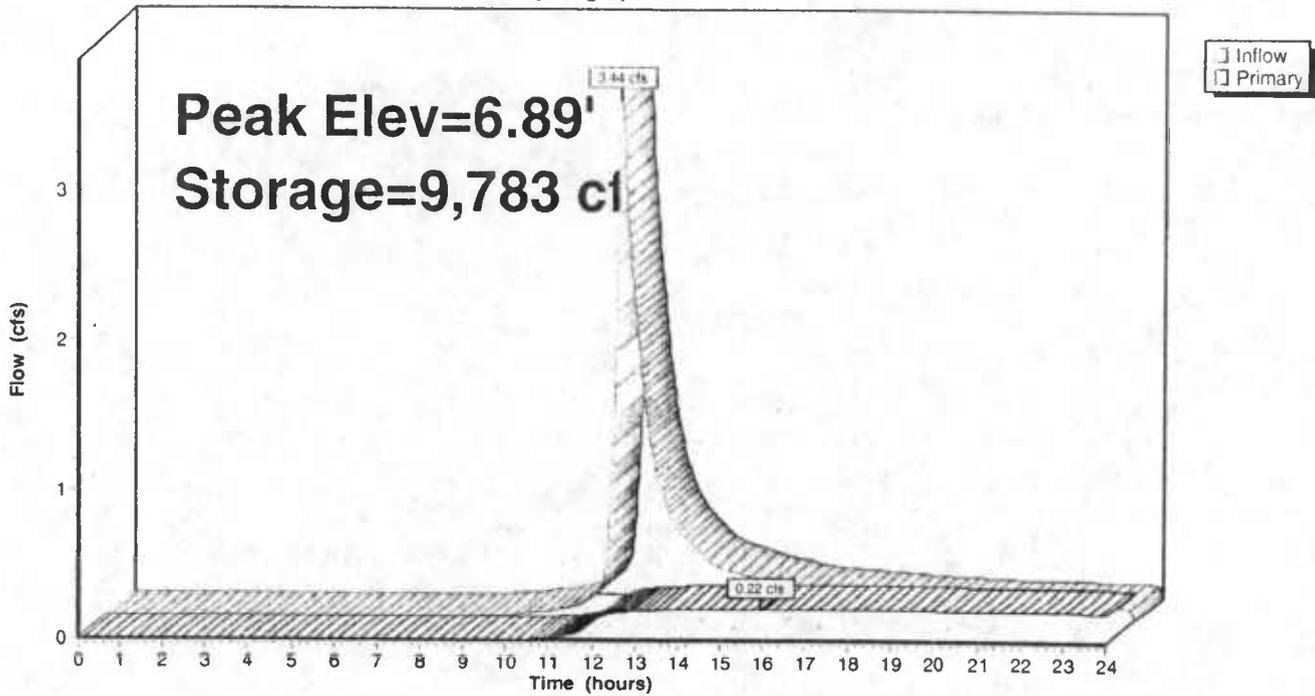
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Type II 24-hr QA 02-yr Rainfall=3.30"

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### Pond 2P: Pond 2

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 10-yr Rainfall=5.30"

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**Subcatchment 1: DA 1**

Runoff = 4.28 cfs @ 12.03 hrs, Volume= 13,988 cf, Depth> 3.34"

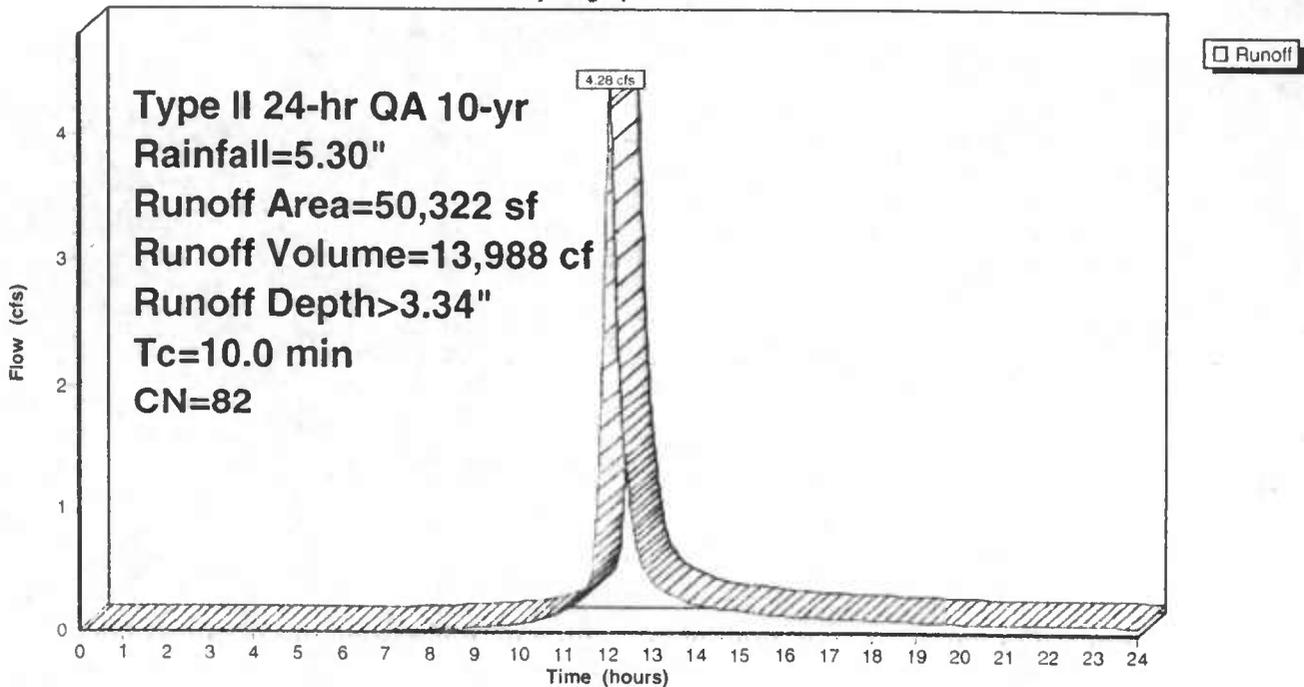
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 10-yr Rainfall=5.30"

Area (sf)	CN	Description
2,496	98	Pond Surface
17,228	95	Gravel Parking
10,274	98	Paved parking & roofs
20,324	61	>75% Grass cover, Good, HSG B
50,322	82	Weighted Average
37,552		Pervious Area
12,770		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, Min Time of Concentration

**Subcatchment 1: DA 1**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 10-yr Rainfall=5.30"

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**Subcatchment 2: DA 2**

Runoff = 6.71 cfs @ 12.03 hrs, Volume= 21,953 cf, Depth> 3.43"

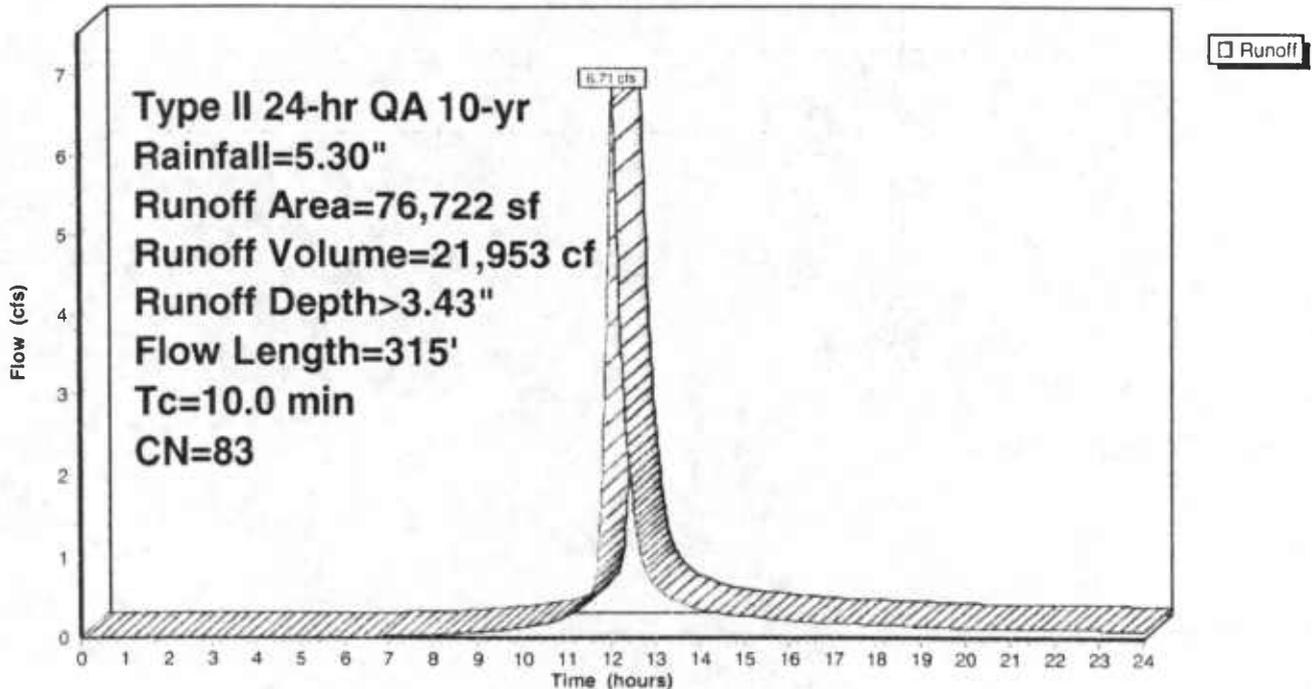
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 10-yr Rainfall=5.30"

Area (sf)	CN	Description
3,114	98	Pond Surface
15,859	95	Gravel Parking
26,968	98	Paved parking & roofs
30,781	61	>75% Grass cover, Good, HSG B
76,722	83	Weighted Average
46,640		Pervious Area
30,082		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	315		0.53		Direct Entry,

**Subcatchment 2: DA 2**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 10-yr Rainfall=5.30"

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**Subcatchment 3: DA 3 - BYPASS**

Runoff = 2.15 cfs @ 12.61 hrs, Volume= 21,699 cf, Depth> 2.63"

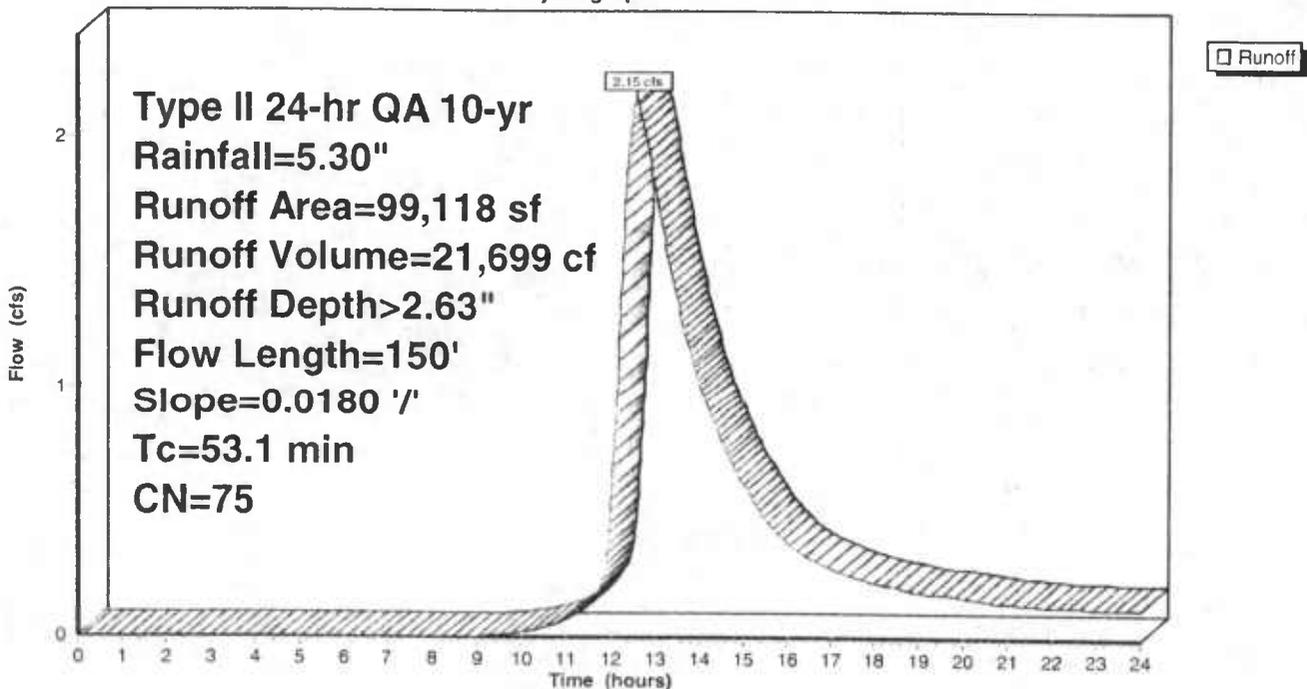
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 10-yr Rainfall=5.30"

Area (sf)	CN	Description
16,688	98	Wetland
60,598	61	>75% Grass cover, Good, HSG B
21,832	98	Paved roads w/curbs & sewers
99,118	75	Weighted Average
60,598		Pervious Area
38,520		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
53.1	150	0.0180	0.05		<b>Sheet Flow,</b> Woods: Dense underbrush n= 0.800 P2= 3.30"

**Subcatchment 3: DA 3 - BYPASS**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 10-yr Rainfall=5.30"

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**Reach CH: Channel**

Inflow = 2.53 cfs @ 12.22 hrs, Volume= 13,166 cf  
Outflow = 2.52 cfs @ 12.25 hrs, Volume= 13,144 cf, Atten= 0%, Lag= 2.0 min

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Max. Velocity= 1.31 fps, Min. Travel Time= 2.5 min  
Avg. Velocity = 0.54 fps, Avg. Travel Time= 6.1 min

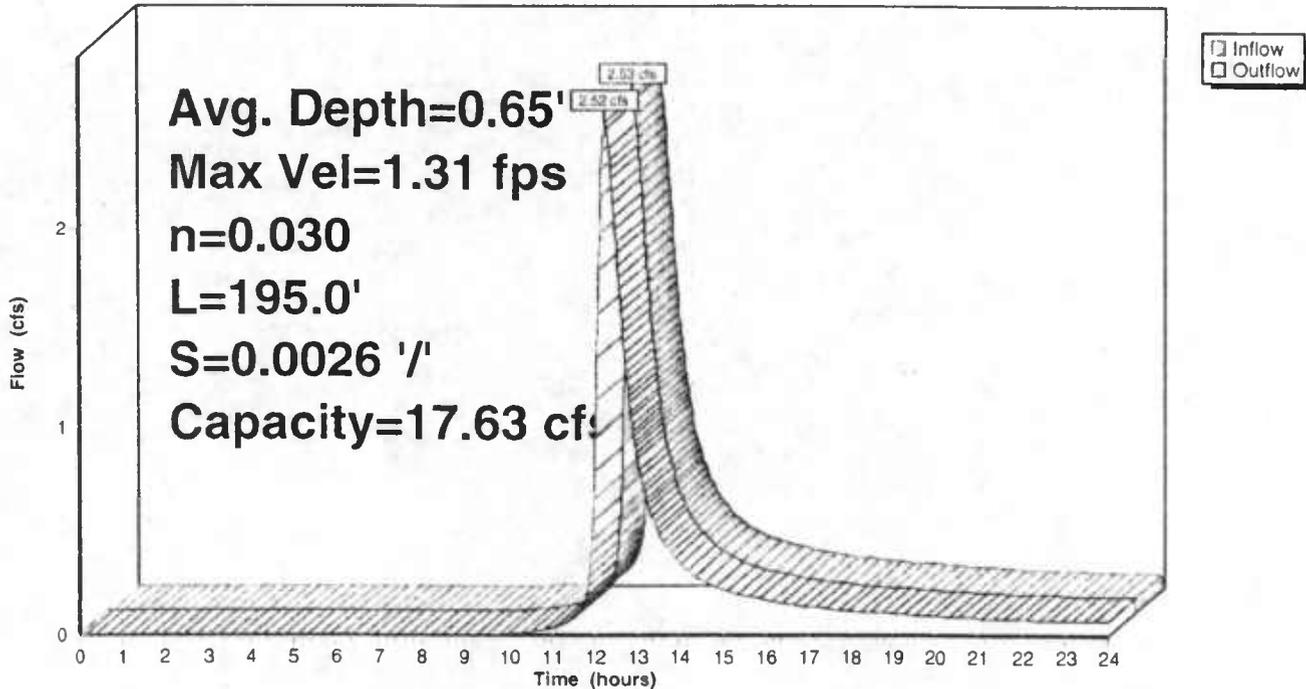
Peak Storage= 376 cf @ 12.25 hrs, Average Depth at Peak Storage= 0.65'  
Bank-Full Depth= 1.50', Capacity at Bank-Full= 17.63 cfs

1.00' x 1.50' deep channel, n= 0.030 Short grass  
Side Slope Z-value= 3.0 '/' Top Width= 10.00'  
Length= 195.0' Slope= 0.0026 '/'  
Inlet Invert= 8.50', Outlet Invert= 8.00'



**Reach CH: Channel**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 10-yr Rainfall=5.30"

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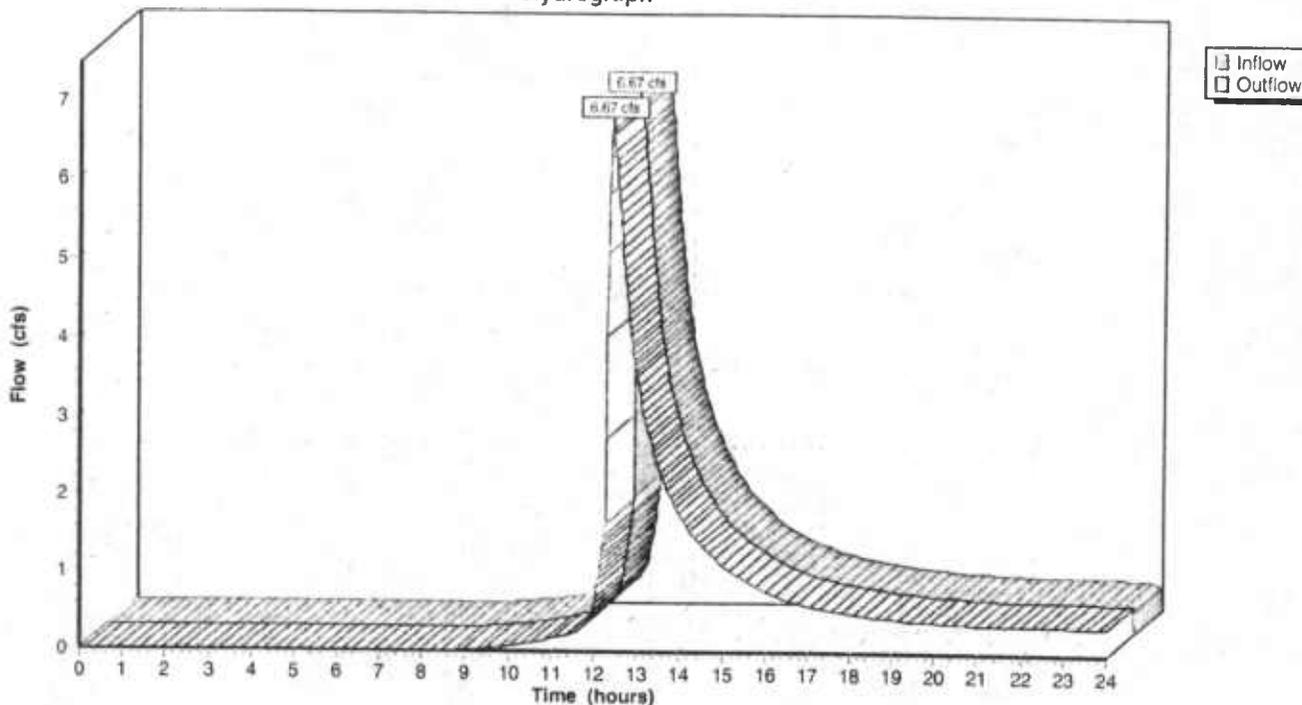
**Reach DP1: Design Point 1**

Inflow = 6.67 cfs @ 12.39 hrs, Volume= 46,222 cf  
Outflow = 6.67 cfs @ 12.41 hrs, Volume= 46,222 cf, Atten= 0%, Lag= 1.2 min

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

**Reach DP1: Design Point 1**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 10-yr Rainfall=5.30"

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**Pond 1P: Pond 1**

Inflow Area = 50,322 sf, Inflow Depth > 3.33" for QA 10-yr event  
 Inflow = 4.28 cfs @ 12.03 hrs, Volume= 13,984 cf  
 Outflow = 2.53 cfs @ 12.22 hrs, Volume= 13,171 cf, Atten= 41%, Lag= 11.3 min  
 Primary = 2.53 cfs @ 12.22 hrs, Volume= 13,171 cf

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
 Peak Elev= 10.01' @ 12.22 hrs Surf.Area= 4,748 sf Storage= 4,053 cf

Plug-Flow detention time= 73.7 min calculated for 13,160 cf (94% of inflow)  
 Center-of-Mass det. time= 41.9 min ( 859.9 - 818.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	9.00'	44,169 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
9.00	3,323	0	0
10.00	4,732	4,028	4,028
11.00	7,793	6,263	10,290
12.00	19,223	13,508	23,798
13.00	21,519	20,371	44,169

Device	Routing	Invert	Outlet Devices
#1	Primary	9.00'	<b>90.0 deg Sharp-Crested Vee/Trap Weir</b> C= 2.50

**Primary OutFlow** Max=2.52 cfs @ 12.22 hrs HW=10.01' TW=9.15' (Dynamic Tailwater)  
 ↳ **1=Sharp-Crested Vee/Trap Weir** (Weir Controls 2.52 cfs @ 2.50 fps)

D1050429-GOOD

Type II 24-hr QA 10-yr Rainfall=5.30"

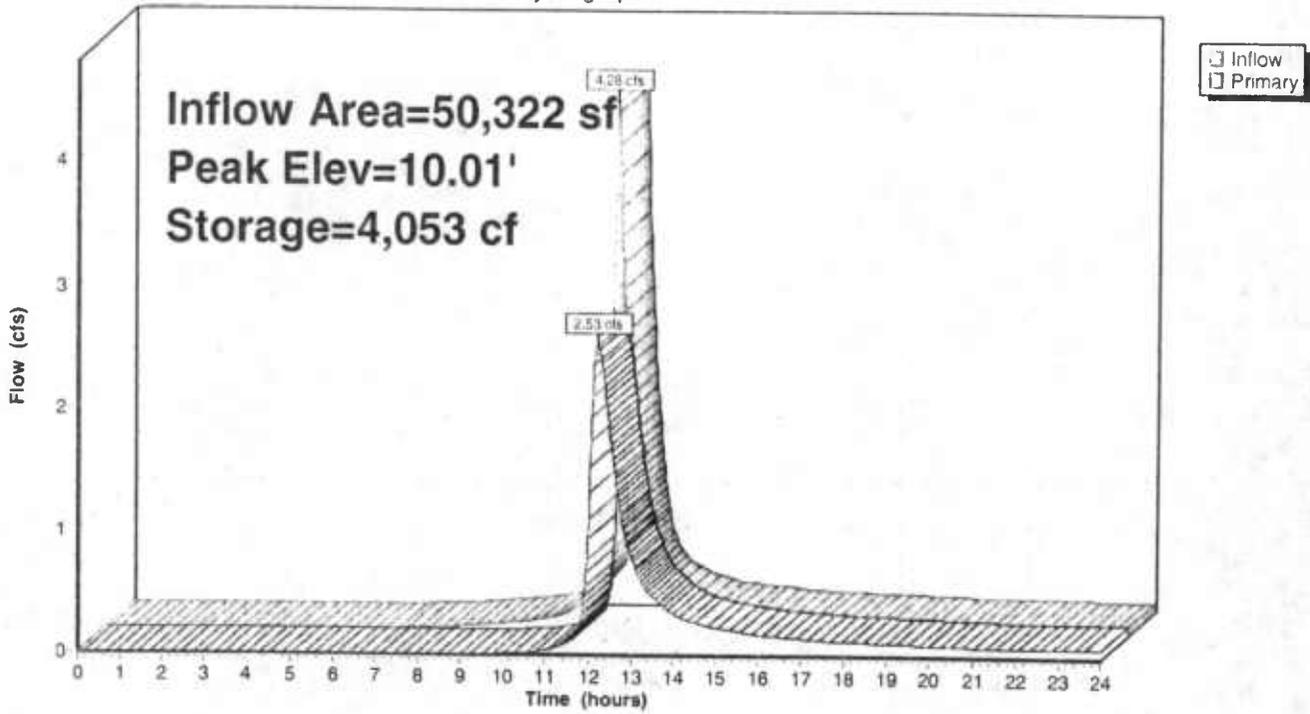
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### Pond 1P: Pond 1

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 10-yr Rainfall=5.30"

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**Pond 2P: Pond 2**

Inflow = 7.86 cfs @ 12.05 hrs, Volume= 35,085 cf  
 Outflow = 4.78 cfs @ 12.38 hrs, Volume= 24,548 cf, Atten= 39%, Lag= 19.5 min  
 Primary = 4.78 cfs @ 12.38 hrs, Volume= 24,548 cf

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
 Peak Elev= 7.27' @ 12.38 hrs Surf.Area= 7,783 sf Storage= 12,649 cf

Plug-Flow detention time= 177.9 min calculated for 24,528 cf (70% of inflow)  
 Center-of-Mass det. time= 79.4 min ( 912.3 - 832.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	5.00'	18,499 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
5.00	2,944	0	0
6.00	5,297	4,121	4,121
7.00	7,630	6,464	10,584
8.00	8,200	7,915	18,499

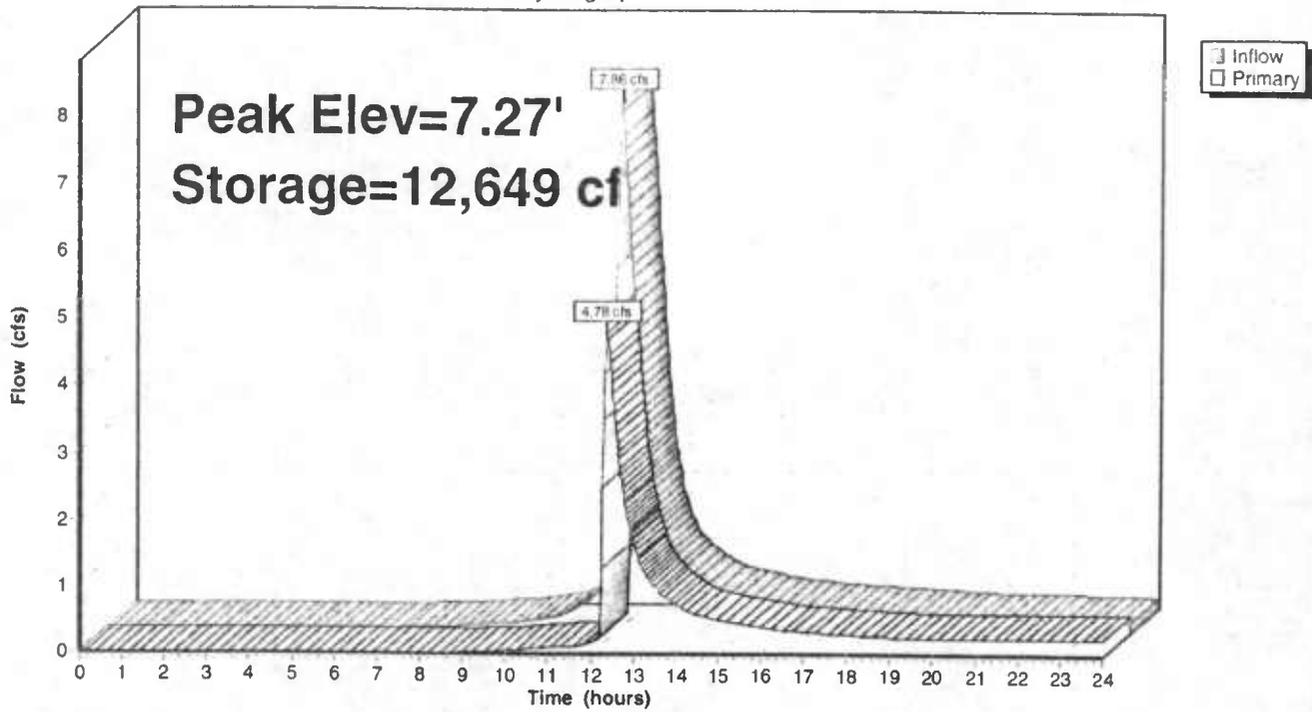
Device	Routing	Invert	Outlet Devices
#1	Primary	5.00'	<b>3.0" x 23.2' long Culvert</b> RCP, end-section conforming to fill, Ke= 0.500 Outlet Invert= 4.65' S= 0.0151 1/1' Cc= 0.900 n= 0.013
#2	Primary	7.10'	<b>27.0' long x 3.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

**Primary OutFlow** Max=4.78 cfs @ 12.38 hrs HW=7.27' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Barrel Controls 0.24 cfs @ 4.99 fps)
- 2=Broad-Crested Rectangular Weir (Weir Controls 4.53 cfs @ 1.00 fps)

### Pond 2P: Pond 2

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 100-yr Rainfall=7.50"

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**Subcatchment 1: DA 1**

Runoff = 6.80 cfs @ 12.03 hrs, Volume= 22,507 cf, Depth> 5.37"

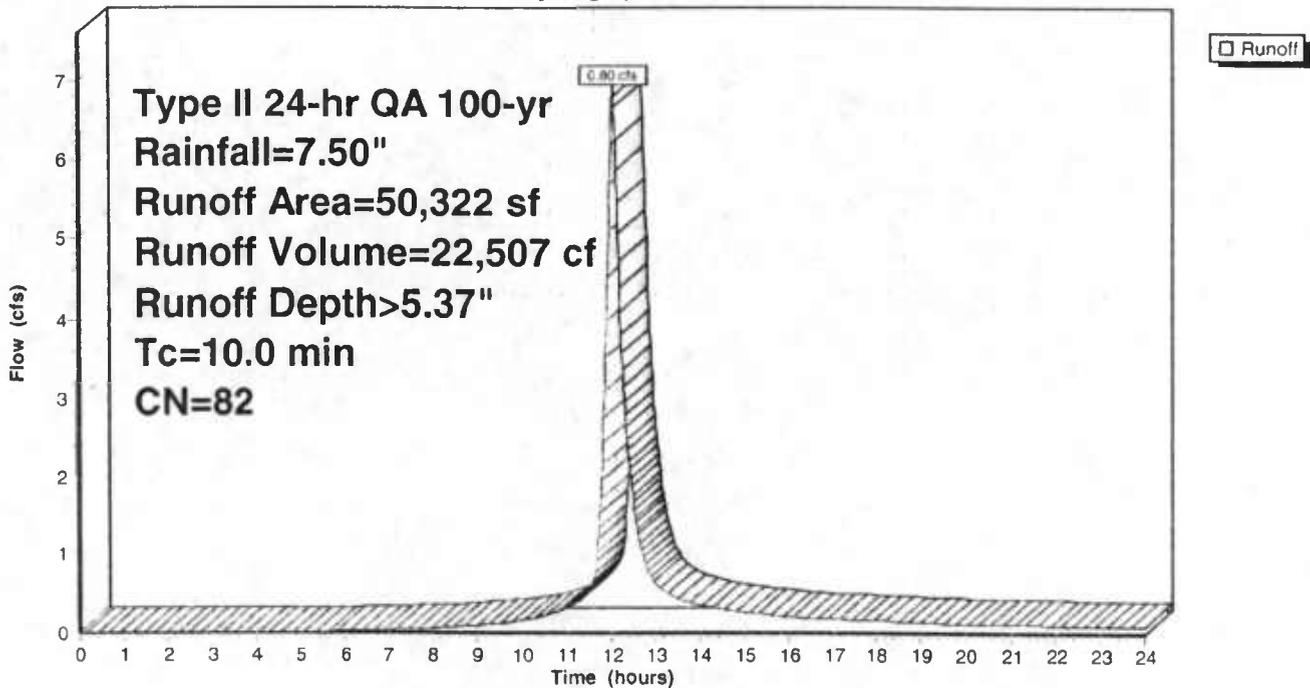
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
 Type II 24-hr QA 100-yr Rainfall=7.50"

Area (sf)	CN	Description
2,496	98	Pond Surface
17,228	95	Gravel Parking
10,274	98	Paved parking & roofs
20,324	61	>75% Grass cover, Good, HSG B
50,322	82	Weighted Average
37,552		Pervious Area
12,770		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, Min Time of Concentration

**Subcatchment 1: DA 1**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 100-yr Rainfall=7.50"

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**Subcatchment 2: DA 2**

Runoff = 10.56 cfs @ 12.03 hrs, Volume= 35,048 cf, Depth> 5.48"

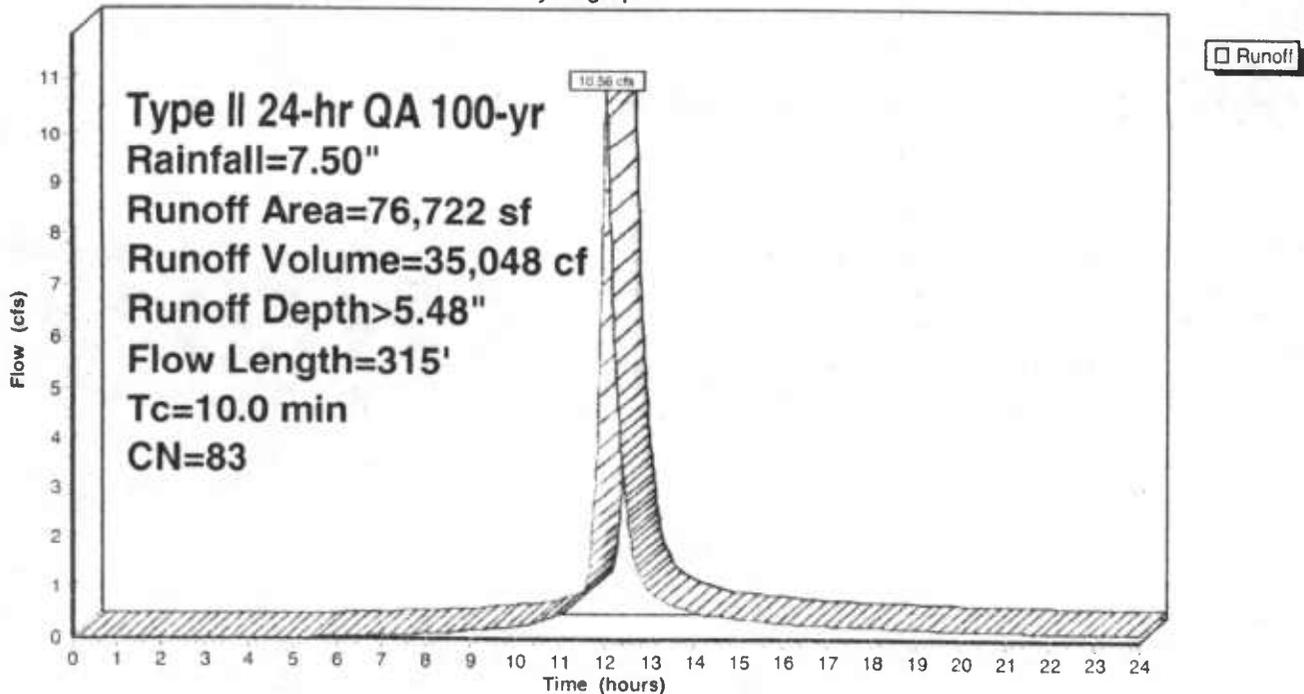
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 100-yr Rainfall=7.50"

Area (sf)	CN	Description
3,114	98	Pond Surface
15,859	95	Gravel Parking
26,968	98	Paved parking & roofs
30,781	61	>75% Grass cover, Good, HSG B
76,722	83	Weighted Average
46,640		Pervious Area
30,082		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	315		0.53		Direct Entry,

**Subcatchment 2: DA 2**

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 100-yr Rainfall=7.50"

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**Subcatchment 3: DA 3 - BYPASS**

Runoff = 3.73 cfs @ 12.52 hrs, Volume= 37,080 cf, Depth> 4.49"

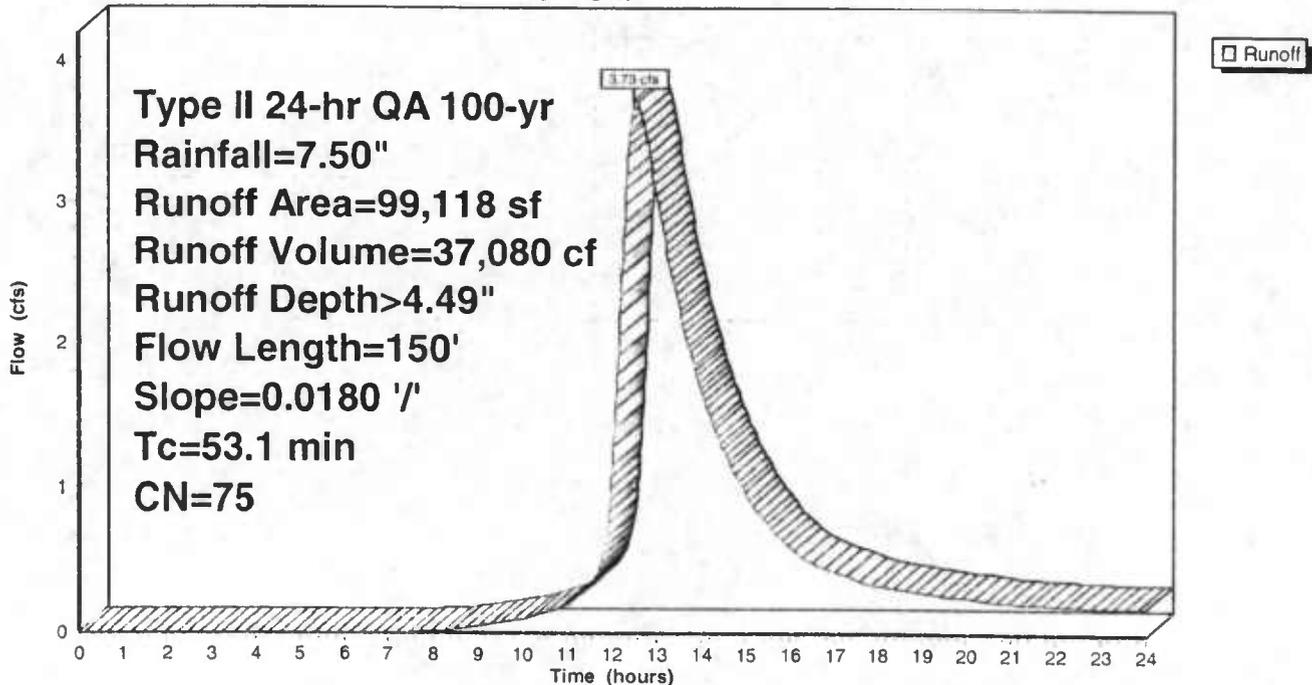
Runoff by SCS TR-20 method, UH=Delmarva, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Type II 24-hr QA 100-yr Rainfall=7.50"

Area (sf)	CN	Description
16,688	98	Wetland
60,598	61	>75% Grass cover, Good, HSG B
21,832	98	Paved roads w/curbs & sewers
99,118	75	Weighted Average
60,598		Pervious Area
38,520		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
53.1	150	0.0180	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.30"

**Subcatchment 3: DA 3 - BYPASS**

Hydrograph



D1050429-GOOD

Type II 24-hr QA 100-yr Rainfall=7.50"

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### Reach CH: Channel

Inflow = 4.62 cfs @ 12.17 hrs, Volume= 21,543 cf  
Outflow = 4.61 cfs @ 12.20 hrs, Volume= 21,515 cf, Atten= 0%, Lag= 1.7 min

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
Max. Velocity= 1.52 fps, Min. Travel Time= 2.1 min  
Avg. Velocity = 0.59 fps, Avg. Travel Time= 5.5 min

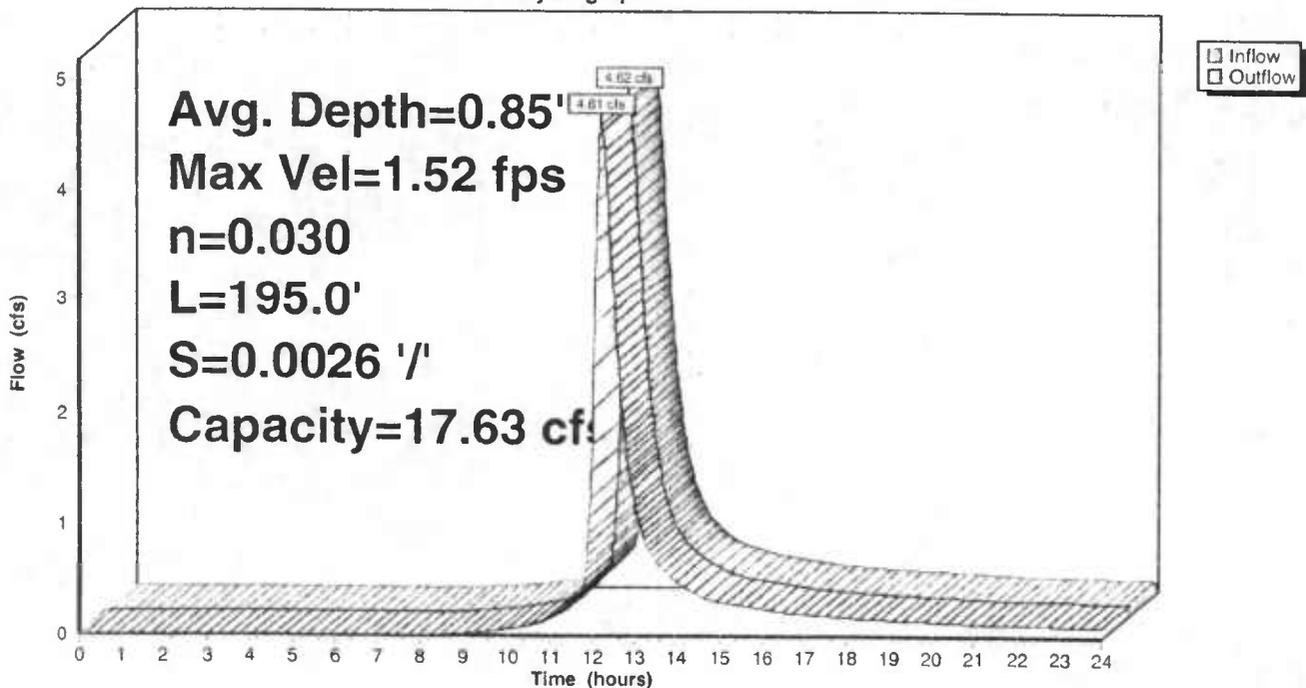
Peak Storage= 590 cf @ 12.20 hrs, Average Depth at Peak Storage= 0.85'  
Bank-Full Depth= 1.50', Capacity at Bank-Full= 17.63 cfs

1.00' x 1.50' deep channel, n= 0.030 Short grass  
Side Slope Z-value= 3.0 '/' Top Width= 10.00'  
Length= 195.0' Slope= 0.0026 '/'  
Inlet Invert= 8.50', Outlet Invert= 8.00'



### Reach CH: Channel

#### Hydrograph



D1050429-GOOD

Type II 24-hr QA 100-yr Rainfall=7.50"

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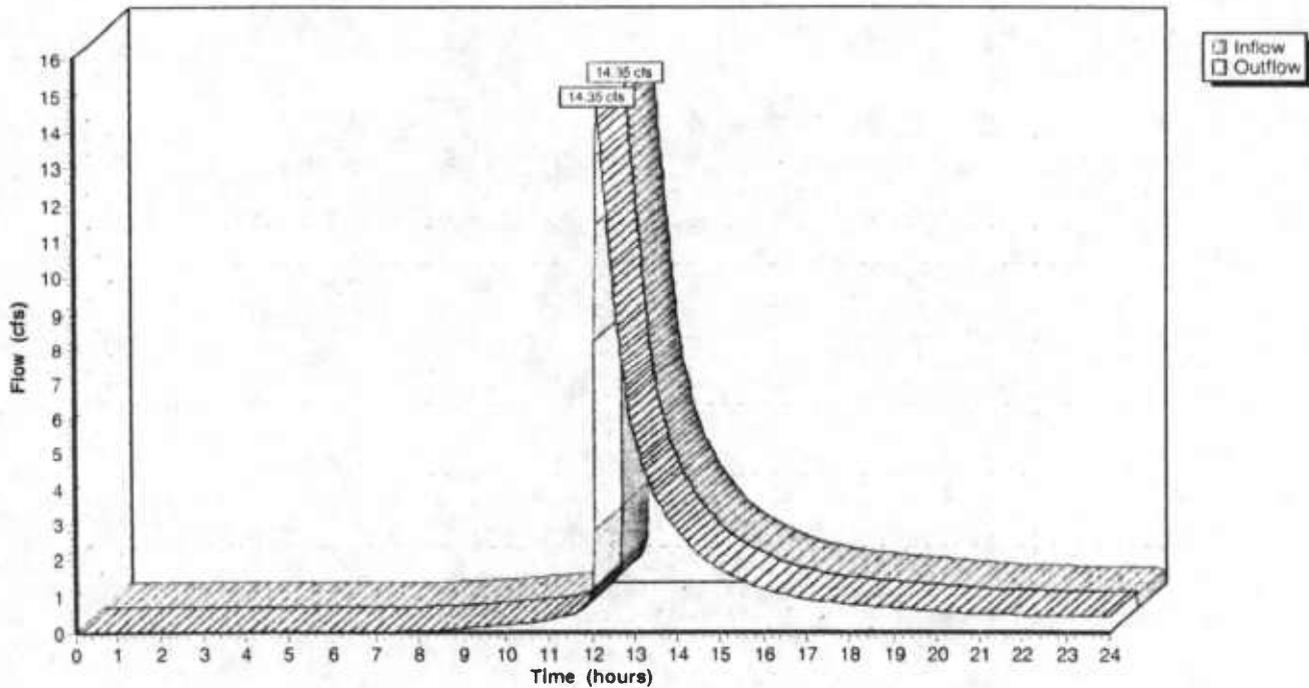
### Reach DP1: Design Point 1

Inflow = 14.35 cfs @ 12.15 hrs, Volume= 82,247 cf  
Outflow = 14.35 cfs @ 12.17 hrs, Volume= 82,247 cf, Atten= 0%, Lag= 1.2 min

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

### Reach DP1: Design Point 1

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 100-yr Rainfall=7.50"

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**Pond 1P: Pond 1**

Inflow Area = 50,322 sf, Inflow Depth > 5.37" for QA 100-yr event  
 Inflow = 6.80 cfs @ 12.03 hrs, Volume= 22,500 cf  
 Outflow = 4.62 cfs @ 12.17 hrs, Volume= 21,550 cf, Atten= 32%, Lag= 8.7 min  
 Primary = 4.62 cfs @ 12.17 hrs, Volume= 21,550 cf

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
 Peak Elev= 10.29' @ 12.18 hrs Surf.Area= 5,606 sf Storage= 5,504 cf

Plug-Flow detention time= 59.4 min calculated for 21,550 cf (96% of inflow)  
 Center-of-Mass det. time= 35.1 min ( 839.8 - 804.6 )

Volume #1	Invert 9.00'	Avail.Storage 44,169 cf	Storage Description
<b>Custom Stage Data (Prismatic) Listed below (Recalc)</b>			

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
9.00	3,323	0	0
10.00	4,732	4,028	4,028
11.00	7,793	6,263	10,290
12.00	19,223	13,508	23,798
13.00	21,519	20,371	44,169

Device #1	Routing Primary	Invert 9.00'	Outlet Devices
<b>90.0 deg Sharp-Crested Vee/Trap Weir C= 2.50</b>			

**Primary OutFlow** Max=4.61 cfs @ 12.17 hrs HW=10.29' TW=9.35' (Dynamic Tailwater)  
 ↳ **1=Sharp-Crested Vee/Trap Weir** (Weir Controls 4.61 cfs @ 2.79 fps)

D1050429-GOOD

Type II 24-hr QA 100-yr Rainfall=7.50"

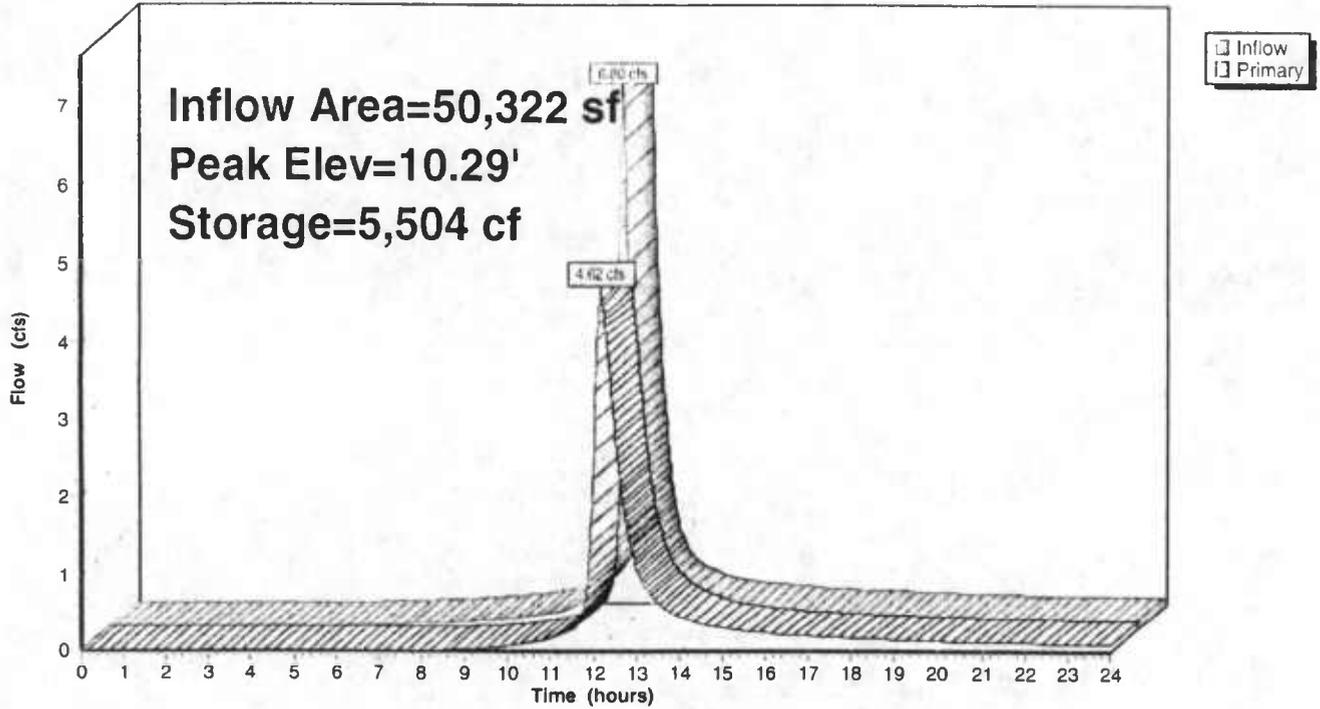
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### Pond 1P: Pond 1

Hydrograph



**D1050429-GOOD**

Type II 24-hr QA 100-yr Rainfall=7.50"

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**Pond 2P: Pond 2**

Inflow = 13.39 cfs @ 12.06 hrs, Volume= 56,546 cf  
 Outflow = 12.54 cfs @ 12.14 hrs, Volume= 45,198 cf, Atten= 6%, Lag= 4.8 min  
 Primary = 12.54 cfs @ 12.14 hrs, Volume= 45,198 cf

Routing by Sim-Route method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs  
 Peak Elev= 7.42' @ 12.14 hrs Surf.Area= 7,869 sf Storage= 13,833 cf

Plug-Flow detention time= 118.3 min calculated for 45,160 cf (80% of inflow)  
 Center-of-Mass det. time= 39.8 min ( 857.1 - 817.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	5.00'	18,499 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
5.00	2,944	0	0
6.00	5,297	4,121	4,121
7.00	7,630	6,464	10,584
8.00	8,200	7,915	18,499

Device	Routing	Invert	Outlet Devices
#1	Primary	5.00'	<b>3.0" x 23.2' long Culvert</b> RCP, end-section conforming to fill, Ke= 0.500 Outlet Invert= 4.65' S= 0.0151 ' /' Cc= 0.900 n= 0.013
#2	Primary	7.10'	<b>27.0' long x 3.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

**Primary OutFlow** Max=12.53 cfs @ 12.14 hrs HW=7.42' TW=0.00' (Dynamic Tailwater)

1=Culvert (Barrel Controls 0.25 cfs @ 5.15 fps)

2=Broad-Crested Rectangular Weir (Weir Controls 12.27 cfs @ 1.43 fps)

D1050429-GOOD

Type II 24-hr QA 100-yr Rainfall=7.50"

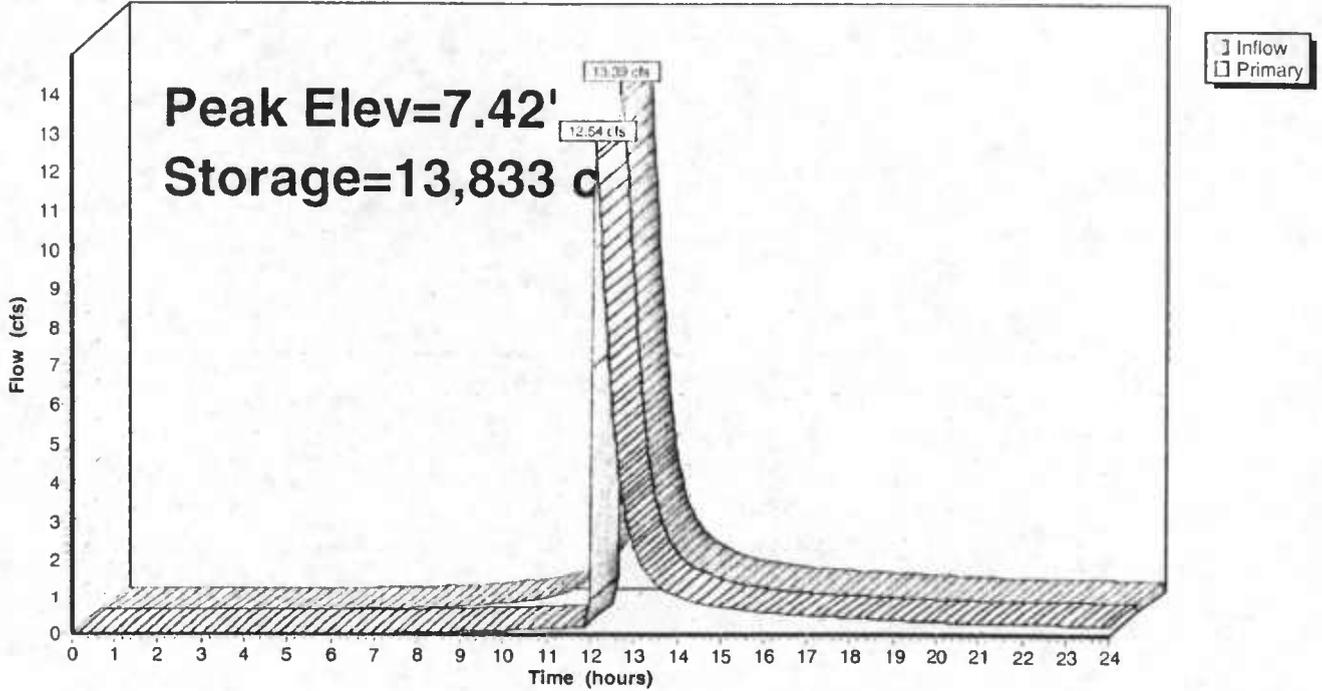
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### Pond 2P: Pond 2

Hydrograph



# McCRONE

## ENGINEERS \* LAND PLANNERS \* LAND SURVEYORS

Site Name: Juleo LLC  
 Location: DA 1  
 Date: 8/24/2006

By: JSK  
 Checked: SEL

### Step 1. Compute WQv Volume

$$WQv = \frac{(P)(Rv)(A)}{12}$$

$$Rv = 0.05 + 0.009I$$

$I = \% \text{ Imperviousness}$

$A = \text{Site Area}$

$P = 1.00$  Eastern Zone  
 $0.90$  Western Zone

### Site Data

$A = 1.158$  acres  
 Impervious Area =  $0.631$  acres  
 % Impervious =  $54.5\%$   
 $Rv = 0.54$   
 Zone = eastern  
 $P = 1$  inches

WQv =	0.05 ac-ft
or	2273 cf

### Step 2. Compute Recharge Volume (Rev)

$$Rev = [(S)(Rv)(A)]/12$$

HSG	Recharge factor	Area	%
A	0.38	0.000	0.00%
B	0.26	1.158	100.00%
C	0.13	0.000	0.00%
D	0.06	0.000	0.00%
		1.158	100.00%

$$Rev = (S)(Ai)$$

$$S = 0.26$$

(percent volume method)

Rev =	0.01 ac-ft
or	591 cf

(percent area method)

Rev =	0.164 ac
	7151 sf

Step 3. Compute Channel Protection Volume (Cpv)

N/A

Step 4. Compute Overbank Flood Protection Volume (Qp)

See TR-55 and TR-20 analysis

Step 5. Extreme Flood Volume (Qf)

N/A

## Summary - DA 1

Step	Requirement	Volume Required (cf)	Volume Provided (cf)	Notes
1	Water Quality (WQv)	2273	4885	Pocket Pond
2	Recharge (Rev)	591	4885	Pocket Pond
3	Channel Protection (Cpv)	N/A	N/A	Not required on Eastern Shore
4	Overbank Flood (Qp)	4040	4242	See DA 2
5	Extreme Flood (Qf)	N/A	N/A	Not required by reviewing authority

# McCRONE

## ENGINEERS \* LAND PLANNERS \* LAND SURVEYORS

Site Name: Juleo LLC  
 Location: DA 2  
 Date: 8/24/2006

By: JSK  
 Checked: SEL

### Step 1. Compute WQv Volume

$$WQv = \frac{(P)(Rv)(A)}{12}$$

$$Rv = 0.05 + 0.009I$$

$I = \% \text{ Imperviousness}$

$A = \text{Site Area}$

$P = 1.00$  Eastern Zone  
 $0.90$  Western Zone

### Site Data

$A = 1.762$  acres  
 Impervious Area =  $0.870$  acres  
 % Impervious =  $49.4\%$   
 $Rv = 0.49$   
 Zone = eastern  
 $P = 1$  inches

WQv =  $0.07$  ac-ft  
 or  $3161$  cf

### Step 2. Compute Recharge Volume (Rev)

$$Rev = \frac{(S)(Rv)(A)}{12}$$

HSG	Recharge factor	Area	%
A	0.38	0.000	0.00%
B	0.26	1.762	100.00%
C	0.13	0.000	0.00%
D	0.06	0.000	0.00%
		1.762	100.00%

$$Rev = (S)(Ai) \quad S = 0.26$$

(percent volume method)

Rev =  $0.02$  ac-ft  
 or  $822$  cf

(percent area method)

Rev =  $0.226$  ac  
 $9850$  sf

Step 3. Compute Channel Protection Volume (Cpv)

N/A

Step 4. Compute Overbank Flood Protection Volume (Qp)

See TR-55 and TR-20 analysis

Step 5. Extreme Flood Volume (Qf)

N/A

## Summary - DA 2

Step	Requirement	Volume Required (cf)	Volume Provided (cf)	Notes
1	Water Quality (WQv)	3161	4041	Pocket Pond
2	Recharge (Rev)	822	4041	Pocket Pond
3	Channel Protection (Cpv)	N/A	N/A	Not required on Eastern Shore
4	Overbank Flood (Qp)	4040	11,818	See Peak Rate Calcs
5	Extreme Flood (Qf)	N/A	N/A	Not required by reviewing authority

# McCRONE

## ENGINEERS \* LAND PLANNERS \* LAND SURVEYORS

Site Name: Juleo LLC  
 Location: DA 3  
 Date: 8/24/2006

By: JSK  
 Checked: SEL

### Step 1. Compute WQv Volume

$$WQv = \frac{(P)(Rv)(A)}{12}$$

$$Rv = 0.05 + 0.009I$$

$I = \% \text{ Imperviousness}$

$A = \text{Site Area}$

$P = 1.00$  Eastern Zone  
 $0.90$  Western Zone

### Site Data

$A = 2.293$  acres  
 Impervious Area =  $0.501$  acres  
 % Impervious =  $21.8\%$   
 $Rv = 0.25$

Zone = eastern  
 $P = 1$  inches

WQv = 0.05 ac-ft  
 or 2053 cf

### Step 2. Compute Recharge Volume (Rev)

$$Rev = [(S)(Rv)(A)]/12$$

HSG	Recharge factor	Area	%
A	0.38	0.000	0.00%
B	0.26	2.293	100.00%
C	0.13	0.000	0.00%
D	0.06	0.000	0.00%
		2.293	0.00%

$$Rev = (S)(Ai) \quad S = 0.26$$

(percent volume method)

Rev = 0.01 ac-ft  
 or 534 cf

(percent area method)

Rev = 0.130 ac  
 5674 sf

Step 3. Compute Channel Protection Volume (Cpv)

N/A

Step 4. Compute Overbank Flood Protection Volume (Qp)

See TR-55 and TR-20 analysis

Step 5. Extreme Flood Volume (Qf)

N/A

Step	Requirement	Volume Required (cf)	Volume Provided (cf)	Notes
1	Water Quality (WQv)	2053	Credit	Grass Channel Credit
2	Recharge (Rev)	534	Credit	Grass Channel Credit
3	Channel Protection (Cpv)	N/A	N/A	Not required on Eastern Shore
4	Overbank Flood (Qp)	N/A	N/A	See DA 2
5	Extreme Flood (Qf)	N/A	N/A	Not required by reviewing authority

# McCRONE

## ENGINEERS \* LAND PLANNERS \* LAND SURVEYORS

Site Name: Juleo  
 Location: Entire Site  
 Date: 10/30/2006 (rev 4/8/2008)

By: LNJ  
 Checked:

DESCRIPTION	ELEV. FT.	SURFACE AREA SQ.FT.	AVERAGE SURFACE AREA SQ. FT.	DIFF IN ELEV. FT	INCREMENT STORAGE CU. FT.	STORAGE CU. FT.	STORAGE ACRE FT.
WET STORAGE	2.00	52.16	290.845	1.00	291	0	
vol req.= 0.14 ac.ft.	3.00	529.53	1271.605	1.00	1272	291	0.007
CELL 2	4.00	2013.68	2478.87	1.00	2479	1562	0.036
	5.00	2944.06				4041	0.093
WET STORAGE	5.00	33.74	183.07	1.00	183	0	
	6.00	332.40	618.475	1.00	618	183	0.004
CELL 1	7.00	904.55	1438.315	1.00	1438	802	0.018
	8.00	1972.08	2644.765	1.00	2645	2240	0.051
	9.00	3317.45				4885	0.112

TOTAL 8926 0.205  
 REQUIRED 5787 0.133

# McCRONE, INC.

## ENGINEERS \* LAND PLANNERS \* LAND SURVEYORS

STORM DRAINAGE CALCULATIONS FOR PIPE SIZING AND DESIGN

Site Name: Juleo  
 Job # D1050429  
 Storm: 10-year

By: LNJ  
 Date: 11/14/2007  
 Checked:

5

**TO STRUCTURE: Culvert  
 DRAINAGE AREA No. # 1**

Q=C.I.A.  
 C= 0.52  
 I\*= 3.60  
 A= 0.321  
 Q= 0.60

Site Data:	"C" FACTOR	ACREAGE	SF	CA
WETLANDS	0.98	0.096	4197	0.094
OPEN SPACE	0.20	0.182	7918	0.036
IMPERVIOUS	0.85	0.042	1849	0.036
		<u>0.321</u>	<u>13964</u>	<u>0.167</u>

\*TC= 30.11 min.

**TO STRUCTURE: Culvert  
 DRAINAGE AREA No. # 2**

Q=C.I.A.  
 C= 0.50  
 I\*= 3.05  
 A= 0.571  
 Q= 0.87

Site Data:	"C" FACTOR	ACREAGE	SF	CA
WETLANDS	0.98	0.096	4197	0.094
OPEN SPACE	0.20	0.329	14343	0.066
IMPERVIOUS	0.85	0.145	6334	0.124
		<u>0.571</u>	<u>24874</u>	<u>0.284</u>

\*TC= 39.19 min.

**TO STRUCTURE: Culvert  
 DRAINAGE AREA No. # 3**

Q=C.I.A.  
 C= 0.51  
 I\*= 2.78  
 A= 0.721  
 Q= 1.02

Site Data:	"C" FACTOR	ACREAGE	SF	CA
WETLANDS	0.98	0.096	4197	0.094
OPEN SPACE	0.20	0.399	17367	0.080
IMPERVIOUS	0.85	0.226	9833	0.192
		<u>0.721</u>	<u>31397</u>	<u>0.366</u>

\*TC= 44.99 min.



**Step 2: Calculate the Pre-Development Load (L<sub>pre</sub>)**

**A. New Development**

$$\begin{aligned}
 L_{pre} &= (.50) A \\
 &= (.50) \frac{(9.74)}{\underline{\hspace{2cm}}} \\
 &= \underline{(4.87)} \text{ lbs / year of total phosphorus}
 \end{aligned}$$

Where:

- L<sub>pre</sub> = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- 0.5 = Annual total phosphorus load from undeveloped lands (lbs/acre/year)
- A = Area of the site within the Critical Area IDA (acres)

**Step 3: Calculate the Post-Development Load (L<sub>post</sub>)**

**A. New Development and Redevelopment**

$$\begin{aligned}
 L_{\text{post}} &= (R_v)(C)(A)(8.16) \\
 R_v &= 0.05 + 0.009 (I_{\text{post}}) \\
 &= 0.05 + 0.009 (20.74) = 0.24 \\
 L_{\text{post}} &= \frac{(0.24)(0.30)(9.74)(8.16)}{(5.64)} \text{ lbs / year of total phosphorus}
 \end{aligned}$$

Where

- L<sub>post</sub> = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- R<sub>v</sub> = Runoff coefficient, which expresses the fraction of the rainfall which is converted into runoff
- I<sub>post</sub> = Post-development (proposed) site imperviousness (i.e., I=75 if site is 75% impervious)
- C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30
- A = Area of the site within the Critical Area IDA (acres)
- 8.16 = Includes regional constants and conversion factors

**Step 4: Calculate the Pollutant Removal Requirement (RR)**

$$\begin{aligned}
 RR &= L_{\text{post}} - (0.9)(L_{\text{pre}}) \\
 &= 5.64 - (0.90)(4.87) \\
 &= 1.26 \text{ lbs/year of total phosphorus}
 \end{aligned}$$

Where

- RR = Pollutant removal requirement ( lbs/year )
- L<sub>post</sub> = Average annual load of total phosphorus exported from the post development site ( lbs/year )
- L<sub>pre</sub> = Average annual load of total phosphorus exported from the site prior to development (lbs/year)





Stormwater Management Checklist – Required for all SWM plans.

**Unified Stormwater Sizing Criteria**

- Water Quality Volume ( $WQ_v$ ) is required per the MDE Design Manual.  $P = 1.0''$  as Queen Anne's County is located in the Eastern Rainfall Zone
- Direct measurement of impervious cover shall be used to determine  $WQ_v$  unless impractical, in that case NRCS estimates can be used per TR-55.
- When a project contains multiple drainage areas, the  $WQ_v$  shall be computed for each separate drainage area.
  
- Recharge Volume ( $Re_v$ ) is required.
- Percent Volume method is used to determine  $Re_v$  when structural practices are used to provide recharge.
- Percent area method is used to determine  $Re_v$  when non-structural practices are used to provide recharge.
  
- Overbank Flood Protection Volume ( $Q_p$ ) is required to control the 2-year storm event. The post-development peak discharge shall not exceed the pre-development peak discharge for the 2-year storm.
- TR-55 and TR-20 (or an approved equivalent) will be used for determining peak discharges. The Eastern Shore Dimensionless Hydrograph shall be used (see MDE Design Manual, Appendix D.14)
- For pre-development hydrologic land use all non-forested vegetated areas (including agriculture) shall be considered meadow in good hydrologic condition.
- Off-site drainage areas should be modeled as present land use condition in good hydrologic condition.
- The length of overland flow used in  $t_c$  calculations is a maximum of 250 feet for pre-development conditions and 150 feet for post-development conditions.
- Overbank flood protection does not apply to direct discharges to tidal water. Tidal water is any body of water that is tidally influenced, but to qualify for this waiver the entire site must be located in the critical area. Any portion of the site outside the critical area must address  $Q_p$  for that portion outside the critical area only.
  
- Extreme Flood Volume ( $Q_r$ ) is only required when development is in floodplain. However, stormwater management BMP's are required to safely pass the 100-year storm. Hydraulic/hydrologic investigations may be required to demonstrate that downstream roads, bridges, and public utilities are adequately protected from the 100-year storm.

Stormwater Management Checklist – Optional, only provide if present on site.

**Stormwater Management Ponds**

Type of Facility (check one):

- Micropool extended detention pond
- Wet pond
- Wet extended detention pond
- Multiple pond system
- Pocket pond
- Other (describe): \_\_\_\_\_

Requirements:

- Stormwater ponds shall have a minimum contributing drainage area of ten acres or more, unless groundwater is confirmed as the primary water source.
- Stormwater ponds cannot be located within jurisdictional waters, including wetlands, without obtaining a Section 404 permit under the Clean Water Act and a State of Maryland wetlands and waterway permit.
- Stormwater ponds located within Use III watersheds shall require a small pond review and approval from the MDE Dam Safety Division.
- N/A Pocket ponds should not contain more than 50% of the WQ<sub>v</sub> below groundwater elevation.
- Borings are required to determine groundwater elevation.

From MD-378, even exempt ponds require the following:

- A stable outfall is required for the 2-year design storm
- Dams shall meet Class A safety hazard classification
- Principal spillway/riser anti-floatation, anti-vortex, and trash rack design.
- One foot of freeboard provided above design high water for the 100-year storm
- Material and construction specifications for the principal spillway shall be in accordance with MD 378 code.
- Material and construction specifications for the embankment shall be in accordance with MD 378 code, except that fill material for the embankment shall conform to Unified Soil Classification GC, SC, SM, MH, ML, CH, or CL.
- No trees are allowed on the embankment or within 15 feet of the toe of the embankment.

Pond Structures require review and approval by the MDE Dam Safety Division if any of the following conditions apply:

- The proposed embankment is twenty feet or greater in height from the upstream toe to the top of dam
- The contributing drainage area is a square mile (640 acres) or greater
- The structure is classified as high or intermediate hazard according to the MD Dam Safety Manual
- The proposed pond is in USE III waters.

N/A

Stormwater Management Checklist – Optional, only provide if present on site.

**Stormwater Management Ponds (continued)**

Conveyance criteria:

- ~~N/A~~ — Forebay provided at each inlet, unless the inlet provides less than 10% of the total design storm inflow to the pond.
- Outfall protection and analysis. Non-erosive velocities are required for the 2-year storm.

Pond Pretreatment Criteria and Minimum Pond Geometry:

- ~~N/A~~ — Sediment forebay sized to 0.1 WQ<sub>v</sub>
- Flowpaths from inflow points to outlets shall be maximized.

Landscaping and Benches:

- ~~N/A~~ — Any permanent pool four feet or greater requires benches with a combined minimum width of 15 feet, benches can be waived if side slopes are 4:1 or gentler.
- ~~N/A~~ — A safety bench from normal water edge to the toe of pond side slope, maximum slope is 6%
- ~~N/A~~ — An aquatic bench extends inward from normal shoreline and has a maximum depth of eighteen inches below the normal pool elevation.
- A landscaping plan is required for stormwater ponds and their buffers.

Maintenance:

- An acceptable maintenance plan for a pond and its buffer is required.
- Principal spillway shall be equipped with a trash rack that provides access for maintenance.
- ~~N/A~~ — Sediment removal in the forebay shall occur when 50% of the total forebay capacity has been lost.
- A maintenance right-of-way or easement shall extend to a pond from a public or private road.
- Direct maintenance access for appropriate equipment shall be provided to the forebay.
- Low flow orifice shall have a minimum diameter of 3 inches and shall be protected from clogging by an acceptable external trash rack. Low flow diameter may be reduced to one inch if an internal orifice is used.

Riser, Drain, and Valves:

- The riser shall be located within the embankment for maintenance access and safety.
  - Each pond shall have a drainpipe that can completely or partially drain the pond within 24 hours.
  - Pond drain shall be equipped with an adjustable valve.
  - Valve controls shall be located inside of the riser at a point where they will not normally be inundated.
  - Riser openings shall not permit unauthorized access. Riser tops that are 4 feet or greater above the ground shall include railings for safety. Endwalls above pipe outfalls greater than 48 inches in diameter shall be fenced.
- ~~N/A~~

Stormwater Management Checklist – Optional, only provide if present on site.

### Non-Structural Stormwater Credits (continued)

#### Grass Channel Credit:

Note: Check dams are not permissible in grass channels along county roads. Although use of Grass Channels automatically meets the  $Re_v$  requirement, trapezoidal channels are not permissible along county roads, therefore the Grass Channel Credit cannot be used to address the  $WQ_v$  requirement, unless along a private road that is privately maintained. Furthermore private stormwater cannot be managed for Water Quality Volume ( $WQ_v$ ) in public right-of-way.

To meet the  $WQ_v$  requirement along a private road the grass channel must meet the following criteria:

- The maximum flow velocity for runoff from the one-inch rainfall shall be less than or equal to 1.0 fps.
- The maximum flow velocity for runoff from the 10-year design event shall be non-erosive.
- The bottom width shall be 2 feet minimum and 8 feet maximum.
- The side slopes shall be 3:1 or flatter.
- The channel slopes shall be less than or equal to 4.0%
- $WQ_v$  credit not applicable if rooftop disconnection is already provided.

#### Environmentally Sensitive Development Credit:

Note: This credit consists of a group of environmental site design techniques and eliminates the need for structural practices to treat  $Re_v$  and  $WQ_v$ .

#### For Single Lot Developments:

- Total site impervious cover is less than 15%
- Lot size shall be at least 2 acres
- Rooftop runoff is disconnected in accordance with the criteria outlined above
- Grass channels are used to convey runoff

#### For Multiple Lot Developments:

- Total site impervious cover is less than 15%
- Lot size shall be at least 2 acres if clustering techniques are not used
- If clustering techniques are used, the average lot size shall not be greater than 50% of the minimum lot size as identified in the appropriate local zoning ordinance and shall be at least one half acre.
- Rooftop runoff is disconnected in accordance with the criteria outlined above.
- Grass channels are used to convey runoff.
- A minimum of 25% of the site is protected in natural conservation areas (by permanent easement or other similar measure).
- The design shall address stormwater ( $Re_v$ ,  $WQ_v$ , and  $Q_p$ ) for all roadway and connected impervious surfaces.

ENVIRONMENTAL REGULATIONS CONSULTANT, INC.

Jan Reese, P.O. Box 298,  
St. Michaels, Maryland 21663  
410-745-2875

12 November 2007



**CHESAPEAKE BAY CRITICAL AREA ENVIRONMENTAL ASSESSMENT  
PROPERTY OF JULEO, LLC**

10.9 ACRES ± ON THE NORTH SIDE OF U.S. ROUTES 50/301 AT STEVENSVILLE,  
KENT ISLAND, QUEEN ANNE'S COUNTY, FOURTH ELECTION DISTRICT,  
TAX MAP 56, BLOCK 6, PARCEL 250

**INTRODUCTION**

The property bounds the north side of U.S. Routes 50/301 between its intersections with Duke Street and the MD Route 8 over-pass in Stevensville, Kent Island, Queen Anne's County. The property location and configuration are depicted in Figure 1, while it can be located on Queen Anne's County ADC Map 22, J-K 1-2.

The elongated, rectangular-shaped property bounds over 1200 linear feet along U.S. Routes 50/301 (Figure 1). The entire property is a fallow thicket of weeds, *Phragmites* reeds, and vine tangles, mounds of Multi-flora Rose, saplings and small trees. An excavated and straightened, headwater stream of Thompson Creek and associated wetlands define the west property boundary, while a linear area of non-tidal wetland projects diagonal from there to the north-central portion of the property. Additionally, an isolated, oval-shaped, non-tidal wetland area is located directly adjacent to the east property boundary. The back of small, developed residential lots fronting along MD Route 18 in downtown Stevensville bound the property on the north, developed commercial lots on the east, U.S. Routes 50/301 on the south, and a headwater stream of Thompson Creek on the west.

The entire property is zoned Urban Commercial (UC) by the Queen Anne's County, Department of Land Use, Growth Management and Environment, while the western 9.7 acres is within limits of the Chesapeake Bay Critical Area designated Intense Development Area (IDA). I visited the property on 27 August 2006 to collect information for this Chesapeake Bay Critical Area Environmental Assessment which may include when appropriate observations from site visits in previous years.

**PROPOSED DEVELOPMENT**

The property is proposed for location and construction of a boat retail sales and boat related merchandise facility on a portion of Parcel 250. Intense Development Area (IDA) designation permits 8.75 acres (381,288 sq. ft.) of

impervious surfaces in the Chesapeake Bay Critical Area portion of the property. Existing impervious areas total 0.434 acre (18,892 sq. ft.). Proposed additional surfaces of 2.125 acres (92,581 sq. ft.) will at completion yield a net impervious area of 2.559 acres (111,473 sq. ft.). The facility will be accessed from the west terminus of existing Island Plaza Drive by an extension of that roadway onto the property. Disposal of sewage effluent will be provided by an existing public system, while an on-site artesian well will provide potable water.

## EXISTING NATURAL FEATURES

### AQUATIC RESOURCES

The property does not bound open tidewater, thus there are no aquatic resources associated with the property.

### TERRESTRIAL RESOURCES

#### Topography

The U.S. Geological Survey, 1973 (Photo-revised) Kent Island, MD Topographic Quadrangle Map (Figure 1) plots no elevation contours on the property or in the region suggesting the property is level, while the nearest elevation given is 13 feet above sea level at the intersection of MD Route 18 and Duke Street about 500 feet northeast of the property. Topography contours plotted on the McCrone, Inc., 2007 Existing Conditions for Juleo, LLC give survey located elevations on the property ranging 4-14 feet above sea level. Level topography void of slopes is confirmed by the site visit.

#### Soils

Figure 2A is taken from the U.S. Department of Agriculture, NRCS/SCS, 2002 Soil Survey of Queen Anne's County, MD, Sheets 30- 31, and shows almost the entire property is comprised of non-hydric Pineyneck silt loam soil (PiB). An exception is hydric Longmarsh & Zekiah soils (LZ) found in a narrow linear area along the west boundary associated with the headwater stream wetlands of Thompson Creek, and Othello silt loam soil (Ot) in the extreme southeast property corner. Pineyneck and Othello substrates are prime agricultural soils in Queen Anne's County. Soil configurations from the Soil Survey are plotted on the McCrone, Inc., 2007 Existing Conditions for Juleo, LLC.

Slow permeability, seasonally near-surface hydrology, and/or frequent flooding create severe limitations for sewage effluent disposal in all property substrates, while limitations are also severe with hydric Longmarsh & Zeekiah, and Othello soils use for home sites and vehicle roadways. Limitations are moderate for use of Pineyneck silt loam soils for home sites and roadways.

#### 100-Year Flood Plain

The Federal Emergency Management Agency, 1992 Queen Anne's County, MD, Unincorporated Areas, Flood Insurance Rate Map 240054, Panel 0038C indicates nearly the entire property is in Flood Hazard Zone "C", an area of minimal flooding outside limits of the 100-year tidal flood. An exception is a narrow, linear area (<200 feet wide & including about 0.778 acre) paralleling the headwater stream of Thompson Creek along the west side of the

property which is in Flood Hazard Zone "A", within limits of the 100-year flood. The McCrone, Inc., 2007 Existing Conditions for Juleo, LLC plots landward limits of the 100-year flood from the FEMA Map.

### Wetlands

Figure 2B is taken from the U.S. Department of the Interior, FWS, 1982 National Wetland Inventory, Kent Island, MD Map that plots Palustrine, emergent, narrow-leaved persistent, temporarily flooded, excavated wetlands (PEM5Ax) in association with the linear headwater stream of Thompson Creek along the west property boundary. The presence, location, and type of wetlands depicted on the NWI Map are confirmed by the site visit.

Landward margins of non-tidal wetlands on the entire property were field delineated by Environmental Regulations Consultant, Inc. in April 1999, subsequently field survey located and plotted by McCrone, Inc., and a delineation verification (CENAB-OP-RS (Stolarz, Edward) 99-63875-3) received from the U.S. Army Corps of Engineers on 17 May 1999. A copy of CENAB-OP-RS 99-63875-3 is included herein while a plotting of that delineation is included on the McCrone, Inc., 2007 Existing Conditions for Juleo, LLC.

### Hydrology and Streams

There was no surface hydrology landward of the headwater stream of Thompson Creek along the west boundary during the site visit, but surface substrates were damp to saturated in wetland areas in the southeast corner of the property, the linear area paralleling the stream, and a narrow landward projection from the west-central portion of the stream northeast to the north boundary.

The U.S. Geological Survey, 1973 (Photo-revised) Kent Island, MD Topographic Quadrangle Map (Figure 1) and the U.S. Department of Agriculture, NRCS/SCS, 2002 Soil Survey of Queen Anne's County, MD, Sheet 30 (Figure 2A) show a perennial stream synonymous with the Thompson Creek headwaters paralleling the west property boundary. Presence of this stream is confirmed by the site visit. A portion of the stream pathway is plotted approaching the property from the south on the McCrone, Inc., 2007 Existing Conditions for Juleo, LLC.

### Vegetative Cover

A dense stand of homogeneous Giant Reed (*Phragmites*) covers the wetlands associated with the west end of the property. Remainder of the property is a former agricultural field permitted to go fallow over 20 years ago. Weeds and thorny plants (asters, goldenrods, fescue grass, blackberries, Multi-flora Rose), vines (Japanese Honeysuckle), shrubs (Hightide Bush, Southern Bayberry), saplings, and small trees (Red Maple, Domestic Apple cultivars) form a thicket there today with most of the woody saplings and trees growing adjacent to the north boundary where they may have seeded naturally from older trees growing on adjoining properties.

### Wildlife

Small trees, saplings, vines, and weeds forming a fallow thicket, non-tidal wetlands, and perennial stream provides cover, seeds, berries, flowers, insect prey, and water for a variety of wildlife organisms such as amphibians, reptiles, birds, and mammals. Species identified on the property during some of the site visit includes: Southern Leopard Frog, Brown Water Snake, Mourning Dove, Carolina Wren, Gray Catbird, Northern Mockingbird, European

Starling, Common Yellowthroat, Northern Cardinal, Red-winged Blackbird, Common Grackle, House Finch, American Goldfinch, Eastern Cottontail, and White-tailed Deer.

### Rare and Endangered Species

No rare, threatened or endangered species of plant or wildlife listed in MD COMAR 08.03.08 were observed on the property during any site visits. An Environmental Review for rare or endangered habitats and species was requested from the MD Department of Natural Resources, Wildlife and Heritage Service on 30 August 2006. The MD DNR responded on 9 October 2006 stating "The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time....". A complete copy of the DNR response is enclosed herein.

The Queen Anne's County, Department of Land Use, Growth Management and Environment, 1995 Queen Anne's County, Natural Resources Map plots the nearest active nesting of protected Bald Eagle (*Haliaeetus leucocephalus*) about two straight-line miles east-southeast of the property. Protected colonial waterbird nesting sites and known occurrence of Delmarva Fox Squirrel (*Sciurus niger*) are respectively mapped within a few hundred feet south of the property (Least Tern colony on roof of Food Lion Supermarket) and about six straight-line miles east of the property. The U.S. Department of the Interior, FWS, Chesapeake Bay Field Office, 2004 Delmarva Fox Squirrel Occurrence in Queen Anne's County, MD plots the nearest squirrel occurrence about 5.5 miles east of the property.

### **PRECAUTIONS FOR POTENTIAL ENVIRONMENTAL IMPACTS**

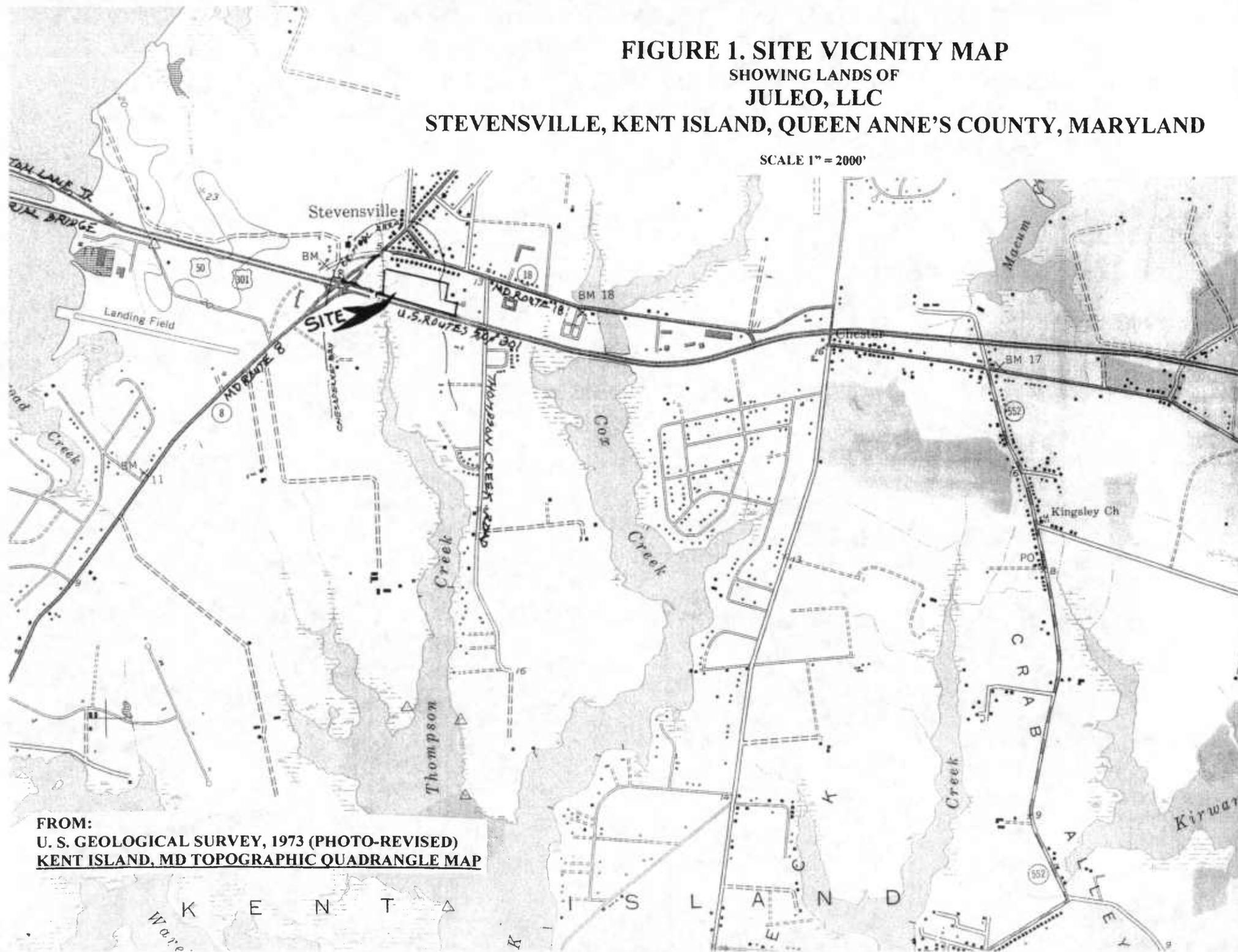
A buffer 300 feet from the margin of the Thompson Creek headwaters stream and 25 feet from the COE approved margins of non-tidal wetlands; landward limits of the Chesapeake Bay Critical Area and 100-year flood plain; and areas of hydric soils are plotted on the McCrone, Inc., 2007 Existing Conditions for Juleo, LLC to comply with the Queen Anne's County, Critical Area Program and wetland regulations. Erosion and sediment control during clearing, excavation, grading and construction will be addressed in a plan developed in accordance with the Queen Anne's County, Soil Conservation standards to minimize the quantity and improve the quality of stormwater run-off to Thompson Creek. Disposal of sewage effluent will be provided to the development by a public system.

### **SUMMARY**

Approximately 9.7 acres of the property are within the Chesapeake Bay Critical Area designated Intense Development Area. The entire property is a fallow thicket of weeds, vines and small trees, zoned Urban Commercial, and a portion proposed for construction of a retail boat sales and storage facility, and associated vehicle parking and roadways. A headwater stream of Thompson Creek and associated linear wetlands with hydric soils define the west boundary and are within the 100-year flood plain while remainder of the level property is higher elevation and comprised of non-hydric Pineyneck soil. Additional linear wetlands indent the property from the stream. Dominant vegetation and wildlife identified during the site visit is listed. There are protected nests of colonial waterbirds within a few hundred feet south of the property. Soil configurations and the landward margin of the Critical Area, stream, wetlands and their appropriate buffers are field delineated, survey located, and/or plotted onto the McCrone, Inc., 2007 Existing Conditions for Juleo, LLC.

**FIGURE 1. SITE VICINITY MAP**  
SHOWING LANDS OF  
**JULEO, LLC**  
**STEVENSVILLE, KENT ISLAND, QUEEN ANNE'S COUNTY, MARYLAND**

SCALE 1" = 2000'



**FROM:**  
**U. S. GEOLOGICAL SURVEY, 1973 (PHOTO-REVISED)**  
**KENT ISLAND, MD TOPOGRAPHIC QUADRANGLE MAP**

KENT ISLAND

**FIGURE 2. SOILS AND WETLANDS ON PROPERTY OF JULEO, LLC  
IN STEVENSVILLE, KENT ISLAND, QUEEN ANNE'S COUNTY**

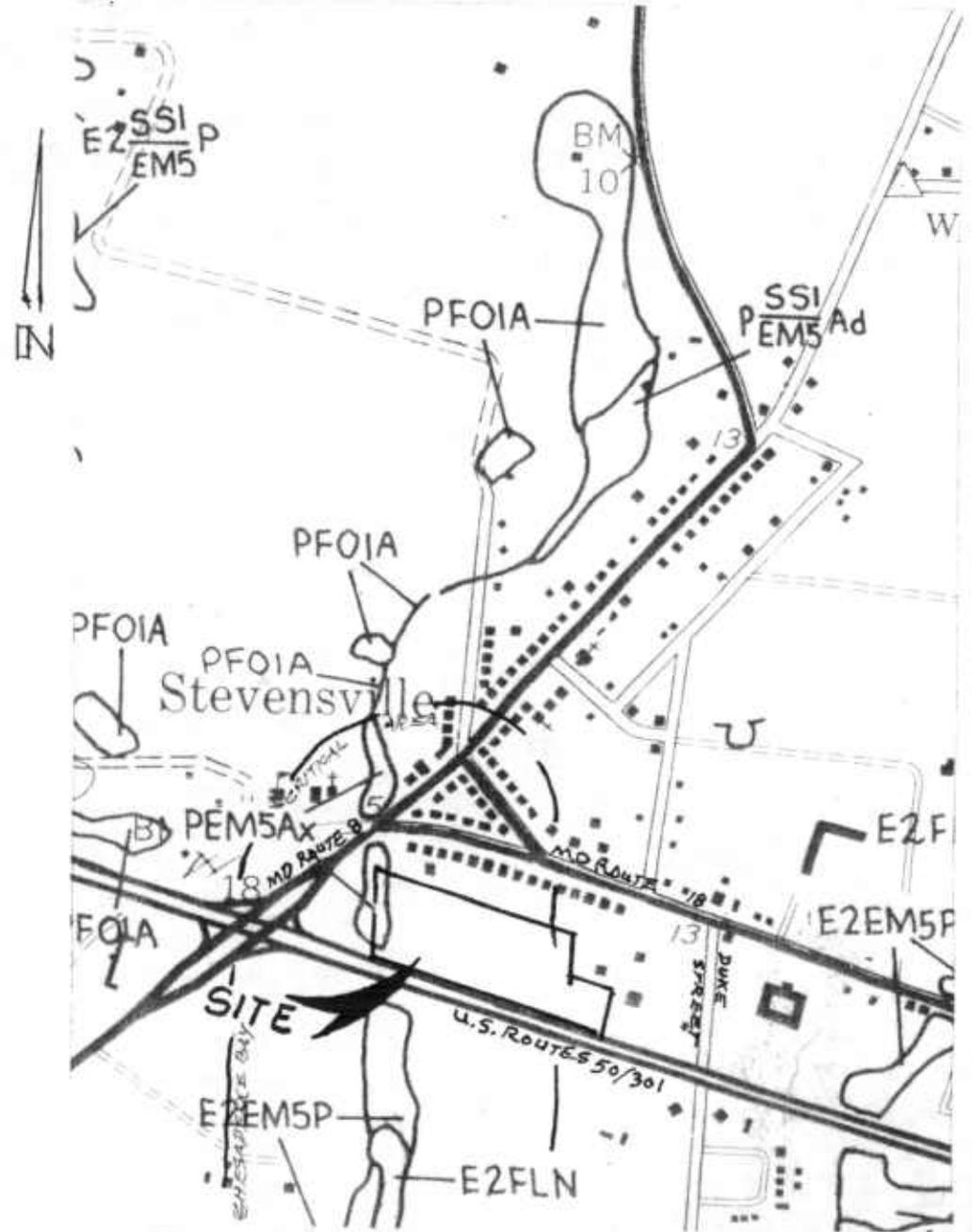
**A) U.S. DEPARTMENT OF AGRICULTURE, NRCS/SCS, 2002  
SOIL SURVEY OF QUEEN ANNE'S COUNTY, MD, SHEETS 30-31**

SCALE 1" = 700'



**B) U.S. DEPARTMENT OF THE INTERIOR, FWS, 1982  
NATIONAL WETLAND INVENTORY, KENT ISLAND, MD MAP**

SCALE 1" = 1300'



RECEIVED 21 May 99



DEPARTMENT OF THE ARMY  
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
P.O. BOX 1715  
BALTIMORE, MD 21203-1715

REPLY TO  
ATTENTION OF

May 17, 1999

Operations Division

Subject: CENAB-OP-RS(Stolarz, Edward)99-63875-3

Mr. Edward Stolarz  
c/o Environmental Regulations Consultant, Inc.  
P.O. Box 298  
St. Michaels, Maryland 21663

Dear Mr. Stolarz:

I am replying to your agent's letter dated April 15, 1999, requesting a jurisdictional determination for an approximate 9.7-acre undeveloped parcel located adjacent to Maryland Route 50/301 and the headwaters of Thompson Creek near Stevensville, Queen Annes County, Maryland.

During an on-site investigation on May 6, 1999, by Mrs. Lynette Rhodes, of this office, it was determined that the extent of non-tidal wetlands on the subject 9.7-acre parcel are accurately depicted on the enclosed plan dated April 13, 1999. Therefore, a Department of the Army permit pursuant to Section 404 of the Clean Water Act will be required for a discharge of dredged or fill material or any other construction activity in the non-tidal wetland areas.

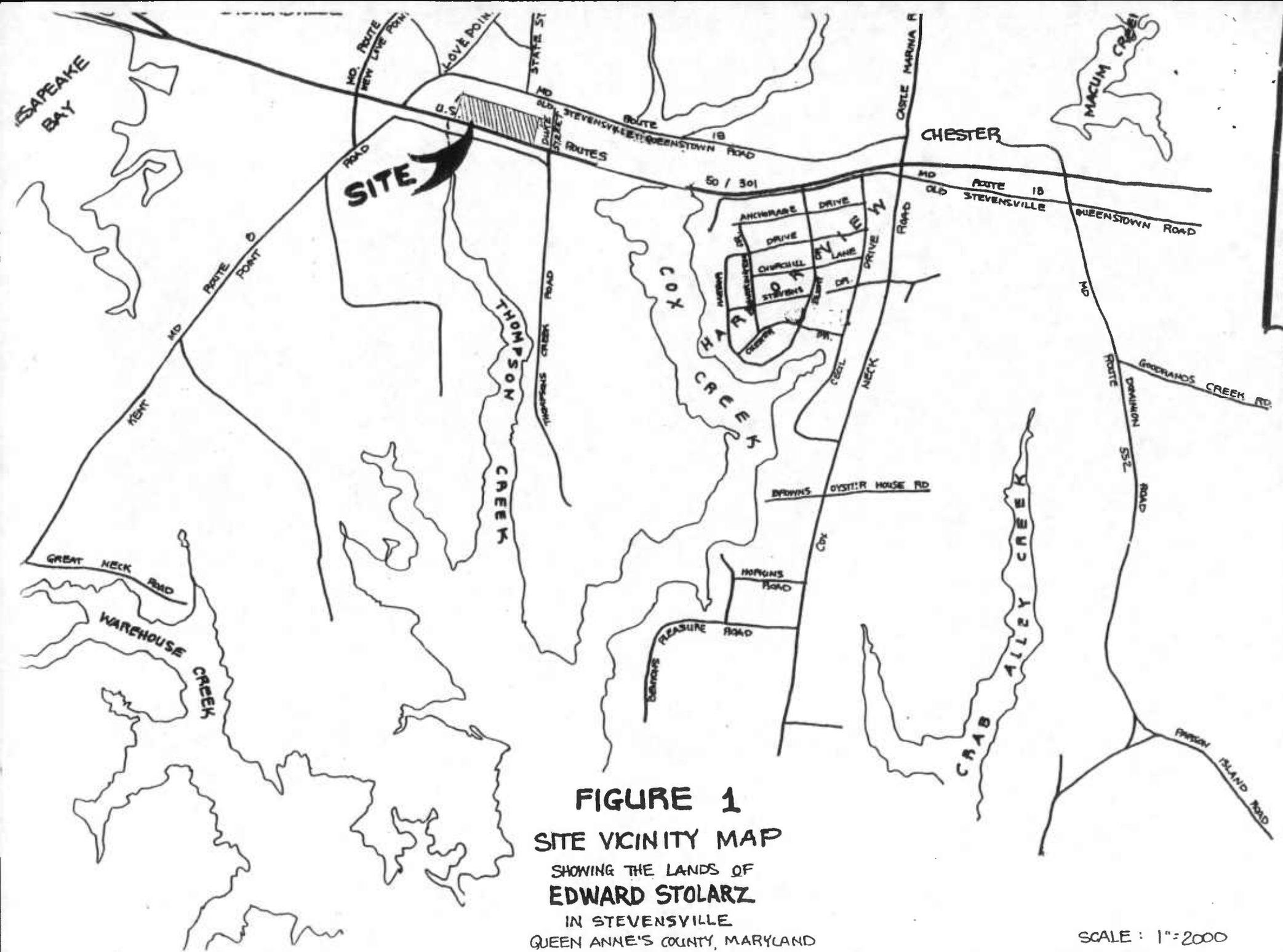
The areas outside of the non-tidal wetland areas on the subject parcel are considered to be "uplands" and are not subject to regulation by the Corps of Engineers. This jurisdictional determination is valid for a period of five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. A Water Quality Certification from the State of Maryland is not required for this jurisdictional determination. Any other required State and local authorizations are to be obtained prior to commencement of any proposed work. In addition, the Interstate Land Sales Full Disclosure Act may require that prospective buyers be made aware, by the seller, of the Federal regulatory authority over any Waters of the U.S., including jurisdictional wetlands, being purchased.

If you have any questions concerning this matter, please call Mrs. Rhodes at (410)962-5686.

Sincerely,

*Lynette Rhodes*  
for Walter Washington, Jr.  
Chief, Eastern Shore Section

Enclosure



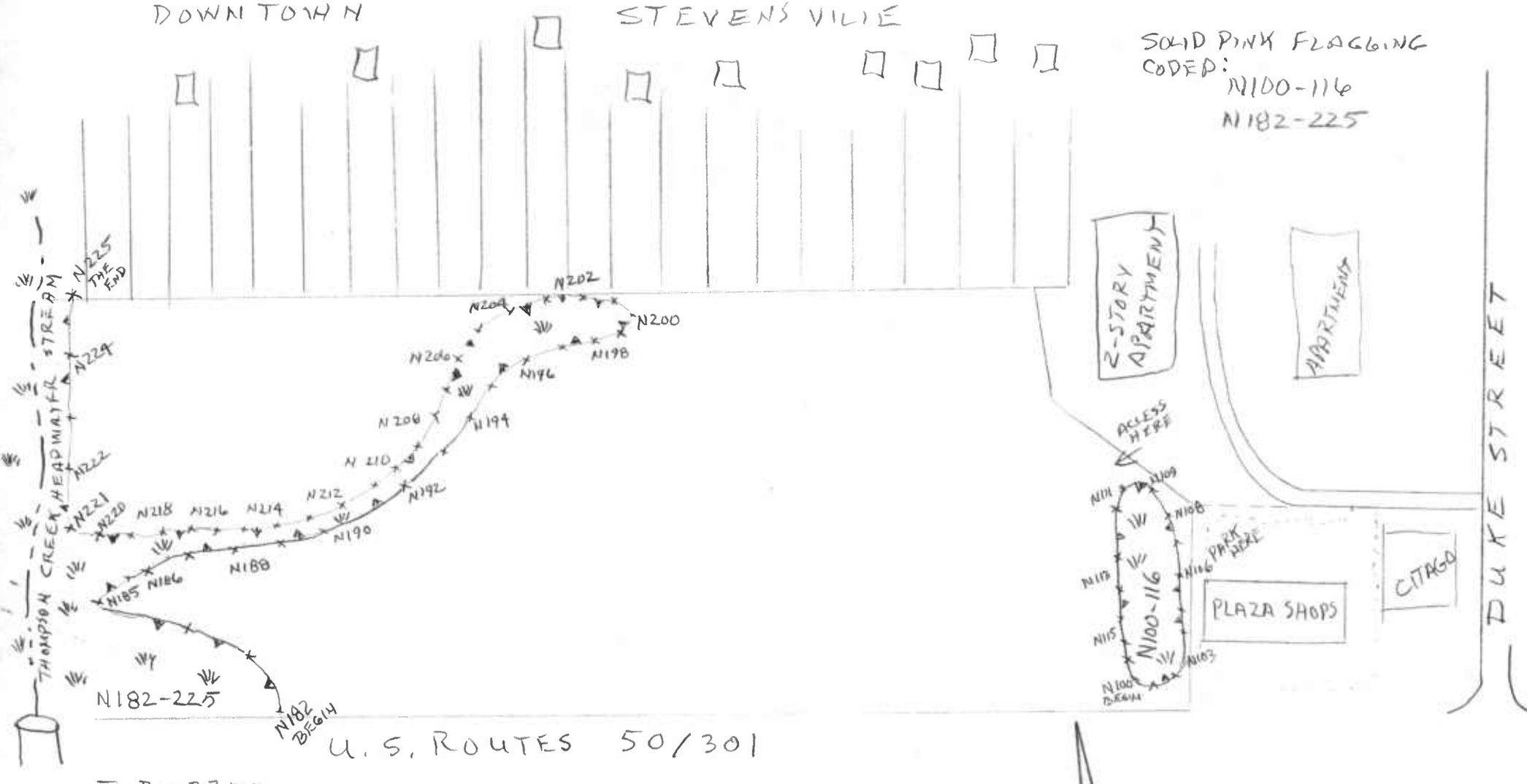
WETLAND FIELD SKETCH  
STOLARZ PROPERTY  
WETLAND DELINEATION  
13 APRIL 1999  
STEVENSVILLE

MD ROUTE 18

DOWNTOWN

STEVENSVILLE

SOLID PINK FLAGGING  
CODED:  
N100-116  
N182-225



TO BAY BRIDGE

U.S. ROUTES 50/301





Robert L. Ehrlich, Jr., Governor

Michael S. Steele, Lt. Governor

C. Ronald Franks, Secretary

October 9, 2006

Mr. Jan Reese  
Environmental Regulations Consultant, Inc.  
P.O. Box 298  
St. Michaels, MD 21663

**RE: Environmental Review for Property of Juleo LLC, Stevensville, Kent Island, Tax Map 56 Parcel 250, Queen Anne's County, Maryland.**

Dear Mr. Reese:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted. It is also important to note that the utilization of state funds, or the need to obtain a state authorized permit may warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. If this project falls into one of these categories, please contact us for further coordination.

As you stated, there is a Least tern colony known to occupy the roof of Thompson Creek Mall during the breeding season. However, due to the location of the project site across US Route 50 from Thompson Creek Mall, it is unlikely that activity at the project site will cause disturbance to the tern colony. Therefore the WHS has no further comments on this project as proposed.

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

Sincerely,

Lori A. Byrne,  
Environmental Review Coordinator  
Wildlife and Heritage Service  
MD Dept. of Natural Resources

ER #2006.2131.qa  
cc: S.A. Smith, DNR  
L. Hoerger, CAC

LAW OFFICES  
**FOSTER, BRADEN & THOMPSON**

L.L.P.

STEVENSVILLE CENTER  
102 EAST MAIN STREET

SUITE 203

STEVENSVILLE, MARYLAND 21666

410-643-4000

MICHAEL R. FOSTER  
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PATRICK E. THOMPSON  
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MARLA STEWART OWCZAREK

FACSIMILE  
410-643-6020

E-MAIL  
www.fbt-lawyers.com

April 5, 2007

**VIA FACSIMILE 410-758-0032**

Christopher F. Drummond, Esquire  
119 Lawyers Row  
Centreville, MD 21617

**VIA FACSIMILE 410-758-3972**

James H. Barton, III, Zoning Administrator  
Queen Anne's County Department of Planning & Zoning  
180 Coursevall Drive  
Centreville, MD 21617

NOV 15 2007

Re: Juleo, LLC (Leo Maler) Property  
Queen Anne's County Tax Map No.: 56, Parcel 250

Dear Messrs. Drummond and Barton:

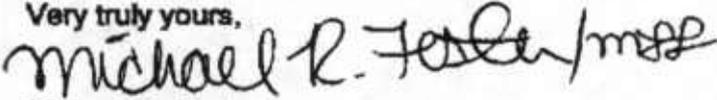
I am happy to report that my client has approved a final resolution on issues relating to the tree clearing and grading permit on the above captioned property upon the following terms and conditions as previously discussed:

1. Clearing Calculations - The cover sheet of the plan will clearly reflect the area where trees were cleared, which must be less than 40,000 sq. ft.
2. Resulting Impervious Surface - The resulting impervious surface following road construction will be reflected which must be below the 10% threshold for site plans contained in §18:1-139.
3. Tree Replacement or Payment in Lieu Of - Though I maintain that §14:1-28(B) does not require reforestation, in order to resolve this matter, we will agree as follows:
  - A. On-Site - If Planning and Zoning, in consultation with my client, determines it feasible, my client will reforest on site with 112 four (4) to six (6) foot tall trees.

- B. Payment in Lieu Of - If Planning and Zoning, in consultation with my client, determines that it is not feasible to locate on site because of site plan or building permit reforestation requirements (on site), he may elect to tender a payment in lieu of on site mitigation which totals \$3,920.00 (112 trees x \$35.00 = \$3,920.00). Juleo, LLC agrees to post a letter of credit or bond to guarantee afforestation or payment in lieu of afforestation in the amount of \$3,920.00 prior to receiving his grading permit. A determination will be made by the Department of Planning & Zoning whether or not it is feasible to afforest on site, such determination being made before the end of the current planting season in 2007. In making this determination, the Department of Planning & Zoning shall take into consideration on site afforestation requirements that may be required on any proposed or pending site plan.
4. Permit Approval - Your office will promptly issue a permit for grading, as currently applied for, provided sureties are posted.
5. Civil Citation - The pending civil citation will be dismissed with prejudice.
6. Site Plan / Building Permit - The tree clearing to date will not be calculated against or reduce or in any way impair the 20% (or greater as may be approved by the director of Planning & Zoning) tree clearing allowance under §14:1-37(E)(3). We understand that the Critical Area Commission may adopt a different point of view on this issue.

Notwithstanding the above, it is the understanding between the parties that this agreement is binding on the applicant, Juleo, LLC, its heirs and assigns and Queen Anne's County.

I have provided a space below for an acknowledgment for both of you to sign. Please execute the same and return to my office as soon as possible.

Very truly yours,  
  
Michael R. Foster

MRF/ml

\_\_\_\_\_  
Christopher F. Drummond, Esquire  
Attorney for Queen Anne's County  
Department of Planning & Zoning

\_\_\_\_\_  
James H. Barton, III, Zoning Administrator  
Queen Anne's County Department of  
Planning & Zoning

LAW OFFICES  
**FOSTER, BRADEN & THOMPSON**

L.L.P.

STEVENSVILLE CENTER

102 EAST MAIN STREET

SUITE 203

STEVENSVILLE, MARYLAND 21666

410-643-4000

MICHAEL R. FOSTER  
J. DONALD BRADEN  
PATRICK E. THOMPSON  
MICHAEL-ANNE T. MUNDY  
E. SEAN POLTRACK  
MARLA STEWART OWCZAREK

FACSIMILE  
410-643-6620

E-MAIL  
www.fbt-lawyers.com

January 11, 2007

**VIA E-MAIL cfdrummond@verizon.net**

Christopher F. Drummond  
119 Lawyers Row  
Centreville, MD 21617

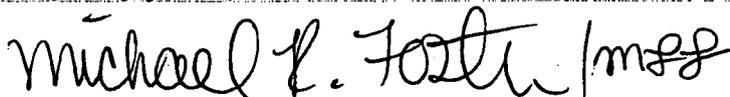
Re: Juleo, LLC (Leo Maier) Property  
Queen Anne's County Tax Map No.: 56, Parcel 250

Dear Chris:

I am enclosing a Timber Harvest Plan for Juleo, LLC prepared by David Chessler, licensed forester. The proposed timber harvest plan impacts 40,000 sq. ft., or less than one (1) acre.

Pursuant to our earlier agreement, my client will now begin timber harvesting within the 40,000 sq. ft. area. He will not be removing stumps or top soil so a grading permit will not be required. It is anticipated that an access way will be installed within the timber harvest area and we will of course apply for all necessary permits prior to any work on site. We will also submit a sediment control plan at that time. I am also delivering a copy of this letter and Chessler's report to Jim Barton at the Department of Planning and Zoning.

Very truly yours,



Michael R. Foster

MRF/ml

Enclosure

cc: Leo Maier, Juleo, LLC  
James H. Barton, III, Zoning Administrator,  
Queen Anne's County Department of Planning & Zoning

# TIMBER HARVEST PLAN

FOR

Juleo LLC  
2601 Cecil Drive  
Chester, MD 21619  
(410) 604- 3363

IN

Queen Anne's County, Maryland

ON

± 10.712 acres (approximately 40,000 square feet of woodlands to be non-commercially harvested for firewood)

LOCATED AT

On the North side of U.S. Rt. 50/301 and at the end of Island Plaza Drive  
Tax Map 56, Parcel 250, Stevensville, MD

PREPARED BY

Chessler's Forestry Services, Inc.  
P.O. Box 2967  
Prince Frederick, MD 20678  
(410) 586-8849

January 8, 2007



# TIMBER HARVEST PLAN

LANDOWNER Juleo LLC

STAND NO. 1 ACREAGE Approximately 9.21  
(Only 40,000 square feet or less is to be noncommercially harvested for firewood)

DOMINANT SPECIES Red maple & Sweetgum

SOILS PiB

SLOPE RANGE 2 to 5 percent

TYPE OF HARVEST Non-commercial firewood harvest (Clear Cut and/or Diameter Limit Cut)

(Clearcut, Shelterwood, Deferred Rotation, Seed Tree, Thinning, Selection, Diameter Limit, etc.)

CURRENT BASAL AREA ± 90 to 110 square feet/acre (includes trees ranging from 4.0" to 12.0 inches, dbh)

POST HARVEST BASAL AREA 0 square feet in harvest area. The rest of the stand will contain at least 90 to 110 square feet of basal per acre in all size classes

DBH OF DOMINANT TIMBER SIZE CLASS 4" to 10"

PROPOSED SITE PREPARATION METHOD N/A

PROPOSED REGENERATION METHOD AND DESIRED RESULTS N/A

EXPLAIN HOW THE PROPOSED HARVEST WILL PROVIDE FOR WILDLIFE CORRIDORS AND CONTINUITY OF HABITAT. The non-commercial firewood harvest area will be approximately 40,000 square feet or less and should not have a negative impact on wildlife since the rest of the area surrounding the property consists of highways, roads, homes, business buildings and is highly developed.

Habitat Protection Areas (HPA) (Timber Harvest is not taking place in HPA according to Maryland Department of Natural Resources - see attached letter dated June 2, 2006 from Ms. Lori A. Byrne to Ms. Laura Kaufmann).

Note if harvesting is to occur in or adjacent to any of the following:

- A. No harvesting will be conducted in a Blue Line Stream or its buffer
- B. Nontidal Wetland (NTW) or its buffer Yes
- C. Threatened & Endangered Species habitat No
- D. Forest Interior Dweller Habitat No (site is not large enough to meet FIDS criteria)
- E. Colonial Netting Bird Habitat No
- F. Plant and Wildlife Habitat of Local Significance No
- G. Natural Heritage Area No
- H. Anadromous Fish Propagation Waters No
- I. Riparian Forests - 300 feet or greater in width No

The portions of the noncommercial firewood harvest area that are in the non-tidal wetlands consists primarily of 4 to 10 inch dbh (diameter breast height) Sweetgum and Red maple. The stand also contains smaller diameter Red maple and Sweetgum in the understory (1.0" to 5.9" dbh). Poison ivy, Greenbriar and Honeysuckle are also present.

Other species of herbaceous vegetation often found growing on hydric soils/non-tidal wetlands are most likely present. However, when the preparer of this Timber Harvest Plan conducted a site visit on December 20, 2006, the other species of vegetation were dormant and unidentifiable.

A nontidal wetlands delineation has been completed by a qualified professional (not done by Chessler's Forestry Services, Inc.) and has been approved by the Army Corps of Engineers (see attached documentation).

Chessler's Forestry Services, Inc. will not be involved in the non-commercial firewood harvest on the property and will not be conducting inspections. It is the landowners and their legal representatives responsibility to comply with all State, County and Federal regulations.

LAW OFFICES  
**FOSTER, BRADEN & THOMPSON**

L.L.P.  
STEVENSVILLE CENTER  
102 EAST MAIN STREET

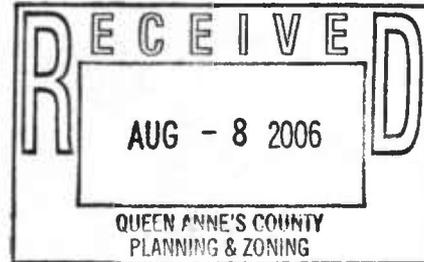
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E. SEAN POLTRACK  
MARLA STEWART OWCZAREK

FACSIMILE  
410-643-6620  
E-MAIL  
www.fbt-lawyers.com

August 7, 2006



**VIA FACSIMILE 410-758-0032 & U.S. MAIL**

Christopher F. Drummond  
119 Lawyers Row  
Centreville, MD 21617

Re: Juleo, LLC (Leo Maier) Property  
Queen Anne's County Tax Map No. 56, Parcel 250

Dear Chris:

I have had an opportunity to review your letter dated August 3, 2006 and offer the following comments.

First of all, I do not rely on any section for my client's right to bushhog and maintain his property. In fact, the opposite is true, in that I rely on an absence of language which would regulate this activity. To be specific, my client's proposed activity on an IDA piece of property is regulated by two sections of Title 14.

There are regulations pertaining to agriculture and timber harvesting in all development areas regulated by §14:1-28. Subsection B applies to the clearing and cutting of trees and do in fact require a timber harvest plan and performance guarantees for all timber harvesting "occurring within any one-year interval and affecting one or more acres in forest and developed woodland in the critical area." My client would clearly be under any threshold level established by this section.

Title 14 further regulates my client's property by virtue of the use and development regulations set forth in Article 9. "Development and redevelopment requiring project approvals within the IDA..." are subject to the express standards set forth in §14:1-37(D). Clearly this section sets forth standards for development where site plan approval is required.

Additionally, paragraph (E) sets forth different site performance standards where only the issuance of a building permit, as opposed to site plan approval, is required.

The sections set forth above are the only regulations applicable to my client's property. He is not proposing a site plan and he is not asking for a building permit nor will he be harvesting timber on one acre or more.

On the practical side, I have advised my client that any bushhogging of the property is permitted provided it is not in the buffer or the nontidal wetland or nontidal wetland buffer areas. I do think we both agree that the ordinance does not contain an adequate definition of what constitutes a protected tree under the provisions of §14:1-28(B) (timber harvesting provisions) or §14:1-37(E)(3) (forest protection standards for building permits in the IDA). Again, we will not be pursuing any activities covered by either section.

We will follow up on your recommendation to hire a forester or tree expert to identify the onsite trees. We also intend to have the bushhogging performed by the same tree expert. I think that we would both agree that this activity does not require any plans or permits pursuant to §14:1-28(B)(3).

In order for my client to evaluate his options and potential uses for the site, it is also our intent to follow up with a formal forest delineation at the same time that the topo is being acquired. Only after this engineering work is performed and placed on a plot plan, will we be able to determine what limitations, if any, are presented to future development by the tree or forest protection standards of Title 14. I will keep you and Helen Spinelli of the Department of Planning and Zoning fully apprised.

Very truly yours,

A handwritten signature in black ink that reads "Michael R. Foster" followed by a stylized monogram or initials, possibly "mrf".

Michael R. Foster

MRF/ml

cc: Leo Maier, Juleo, LLC  
Helen Spinelli, QAC Department of Planning & Zoning ✓

LAW OFFICES  
**FOSTER, BRADEN & THOMPSON**

L.L.P.

STEVENSVILLE CENTER

102 EAST MAIN STREET

SUITE 203

STEVENSVILLE, MARYLAND 21666

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MARLA STEWART OWCZAREK

FACSIMILE  
410-643-6620  
E-MAIL  
www.fbt-lawyers.com

June 23, 2006

**VIA FACSIMILE (410) 758-2905 & U.S. MAIL**

Helen M. Spinelli  
Queen Anne's County Department of Planning and Zoning  
160 Coursevall Drive  
Centreville, MD 21617

Re: Leo Maier / Juleo, LLC Property  
Queen Anne's County Tax Map No.: 56, Parcel 250

Dear Helen:

I represent Juleo, LLC, a Maryland limited liability company, owner of a ten (10) acre parcel of land located in Stevensville, being Parcel 250 set forth on Tax Map 56. The parcel is zoned Urban Commercial, is located in the growth area, with an IDA critical area designation.

Subsequent to my client's acquisition of the property, we visited the site and it was virtually impenetrable due to briars, multi flora rose and small sapplings.

My client intends to bushhog a portion of the site to allow for access so that he may walk and evaluate his property.

Pursuant to instructions from your department, he applied for a permit "to remove undergrowth sapplings, debris, illegally discarded items found on site, fire hazard brush, dead timber, abandoned billboards and general cleanup."

A review of all applicable ordinances in Queen Anne's County does not reveal any authority for you to require any permit. I have previously advised you accordingly. Nevertheless, in an effort to amicably resolve this matter, I met with you at the site last Friday, June 16, 2006 and informed you that my client would be bushhogging the property, however these activities would not disturb any non-tidal wetlands or non-tidal wetland

buffer areas. Additionally, all of the bushhogging would be outside of the critical area buffer.

Your correspondence dated June 22, 2006 indicates that the permit "may not be approved." As I have indicated above, I think this is academic since a permit is not required.

Your letter cites the provisions of 14:1-28B which are "regulation of agriculture and timber harvesting in all development areas." Where such activity is intended, a timber harvesting plan and performance guarantees are required. Here, there will be no timber harvesting or cutting of trees in any forest or "cutting of trees in any forest" which affects "one or more acres."

While the ordinance defines "tree" as "woody perennial plant..." without reference to size, it is quite clear that the statute does not envision the felling of a timber harvest plant where the cutting of saplings is involved. If this were not the case, one acre of six (6) inch saplings would constitute a forest (forest being defined as one acre or more of trees). See 14:1-11.

I would also refer you to the site performance standards in the IDA district (14:1-37E (3)) which only requires replacement of trees of 4" caliber or greater. Arguably, trees below this caliber may not be jurisdictionally protected. If your department or the Critical Area Commission has a different opinion, please let me know. Basically, I would ask you when does "tree life begin." Is it with the acorn or when the acorn first sprouts roots? In reaching this decision, please be mindful of the Supreme Court decision in *Roe v. Wade* where human fetuses are not even protected until the third trimester.

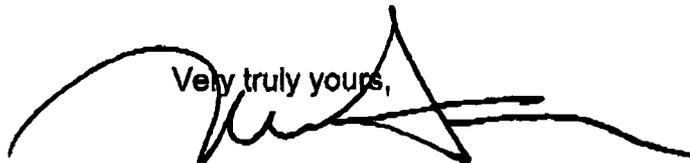
In any event, my client will not be cutting any "trees" and even if you feel the "saplings" or "shoots" are trees, I suspect he will be under one acre, which is permitted by 14:1-28B.

In addition to the aforementioned critical area section, the only other sections regulating use and development are contained in 14:1-37. Subsection "D" requires site performance standards for project approvals. Here, we do not have a project so we cannot seek approval.

Subsection "E" requires site performance standards for building permits. Once again, my client proposes no building. To the contrary, he is only seeking to maintain the property so that he can walk within its boundaries and evaluate its future lawful uses.

In the event I have overlooked regulatory authority provided elsewhere, please contact me as soon as possible. Otherwise, my client intends to commence bushhogging immediately.

Very truly yours,



Michael R. Foster

MRF/ml

cc: Leo Maier  
Christopher F. Drummond, Esquire  
Christina Clark, McCrone, Inc.  
Ren Serey, Maryland Critical Area Commission  
Rod Schwarm, U.S. Army Corps of Engineers  
Chris Clark, Maryland Critical Area Commission  
Chris Pajak, Maryland Department of the Environment, Non-Tidal Wetlands  
Division

LAW OFFICES

## CHRISTOPHER F. DRUMMOND

CHRISTOPHER F. DRUMMOND  
S. CRAIG SEWELL

119 LAWYERS ROW  
CENTREVILLE, MARYLAND 21617

Telephone: (410) 758-0030  
Facsimile: (410) 758-0032  
E-mail: cfdrummond@verizon.net

August 3, 2006

AUG 04 2006

Helen Spinelli, Land Use Planner  
Queen Anne's County Department  
Of Planning And Zoning  
160 Coursevall Drive  
Centreville, Maryland 21617

QA COUNTY PLANNING &amp; ZONING

Re: Leo Maier Property  
Tax Map 56, Parcel 250

Dear Helen:

I have again reviewed the correspondence among the Department, Michael R. Foster, Esquire, and the Critical Area Commission regarding Mr. Maier's proposal to remove debris, "fire hazard brush", "dead timber", "undergrowth sapplings" (sic), etc. from the 10.7± acre parcel of land he owns on Kent Island. To review, the property is largely in the Critical Area and has an IDA designation. No particular commercial project is under consideration by Mr. Maier. He simply desires to clean and clear the property of debris and what he considers unwanted vegetative growth.

Mr. Foster argues that Mr. Maier does not require a permit to undertake the work he proposes. To a large extent, I agree with Mr. Foster. However, it is my opinion that the removal of any "trees" will require the submission and approval of timber harvest and sediment control plans under §14-1-28(B)(1) and (2) of the *Queen Anne's County Code*. The proposed work is a "development activity" regulated by Title 14.

§14-1-11 defines a "tree" as a "woody perennial plant having a single, usually elongated, main stem, generally with few or no branches on its lower part". Mr. Foster argues that the definition must be read in conjunction with §14-1-37(E)(3)(c) which requires the one-to-one replacement of trees with a DBH of greater than 4" that are removed in connection with construction of an approved project. He argues, therefore, that "trees" less than 4" DBH are not regulated by Title 14 and may be removed with the plans required in §14-1-28(B)(1) and (2). I cannot agree.

First of all, the section relied upon by Mr. Foster clearly establishes a 20% limit for the removal of *all* trees in a forest or developed woodland for projects requiring building permits. The only trees that must be replaced on a one-to-one basis are those with a DBH of greater than 4". If we follow Mr. Foster's logic, a tract with *no* trees with a DBH of greater than 4" could be completely cleared during construction of an approved project. Obviously, that result is not

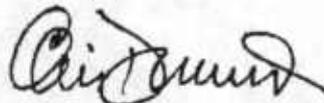
intended by §14-1-37(E)(3). The  
Helen Spinelli, Land Use Planner  
August 3, 2006  
Page Two.

point to be made is that some, if not all, of the "sapplings" (sic) to which Mr. Foster refers are "trees" by definition and may not be cut without the required plans and proper approvals. To find otherwise would produce the perverse result of allowing a large area of property to be cleared prior to the submission of a application for a building permit, thereby avoiding the 80% level of protection given to forests and developed woodlands in the IDA. The same result, though perhaps less severe, could occur for a UC District project on the property that requires that at least 20% of the site remain vegetated. Obviously, the goal of Title 14 is to leave as much of the required 20% as possible in forest cover.

Mr. Foster poses the metaphysical question: "when does a tree become a tree"? I am quite sure I cannot answer that question and rather doubt anyone in the Department can. In any event, metaphysics is unnecessary where we have a perfectly clear definition. Moreover, the distinction between a "tree" and something else in the vegetative world is exactly why a registered professional forester must prepare the timber harvest plan. I would not be surprised to learn that much of the undergrowth on Mr. Maier's property does not qualify as a "tree". The forester may also recommend the removal of many young trees to improve the health of the forest on the property.

I recommend that Mr. Maier be asked to prepare the plans required by §14-1-28(B)(3) before any permits are issued to him regarding the removal of any vegetation.

Very truly yours,



Christopher F. Drummond

CFD/bjm

NY



DEPARTMENT OF THE ARMY  
BALTIMORE DISTRICT, CORPS OF ENGINEERS  
10 SOUTH HOWARD STREET  
BALTIMORE, MARYLAND 21201

May 11, 2004

REPLY TO  
ATTENTION OF:

Operations Division

Mr. Edward Stolarz  
c/o Mr. Joseph C. Stolarz  
9668 Sugar Pine Court  
Davie, Florida 33328



Dear Mr. Stolarz:

This is in reference to your letter dated May 5, 2004, regarding application CENAB-OP-RMS (EDWARD STOLARZ) 2004-01363-13, requesting a jurisdictional determination (JD) and verification of the delineation of Waters of the United States, including jurisdictional wetlands adjacent to Thompson Creek, on your property, Tax Map 56, Parcel 250, Stevensville, Queen Anne's County, Maryland.

A field inspection was conducted on May 7, 2004. This inspection indicated that the delineation of Waters of the United States, including jurisdictional wetlands, on the enclosed drawing enclosed with your request dated May 5, 2004, is accurate. Those areas indicated as Waters of the United States, including tidal or non-tidal wetlands are regulated by this office pursuant to Section 10 of the River and Harbor Act of 1899 and/or Section 404 of the Clean Water Act. Enclosed is a document that outlines the basis of our determination of jurisdiction over these areas.

Please note that on March 28, 2000, an administrative appeals process was established for JDs. Enclosed is a JD appeals form that can be used if you believe the JD you received warrants further review. You may accept this JD, submit new information seeking reconsideration of the JD or appeal the JD. If you accept the JD, you do not need to notify the Corps. A JD will be reconsidered if you submit new information or data to the Baltimore District Engineer (DE) within 60 days from the date of this letter. If you decide to appeal the approved JD, please submit the attached form within 60 days from the date of this letter to our Regulatory Appeals Review Officer at the following address:

James W. Haggerty  
Regulatory Appeals Review Officer  
North Atlantic Division, US Army Corps of Engineers  
Fort Hamilton Military Community  
General Lee Avenue, Bldg 301  
Brooklyn, NY 11252-6700

-2-

If we do not hear from you within 60 days, we will consider this JD accepted by you. This approved JD is valid for five years from the date of issuance unless new information warrants a revision before the expiration date.

You are reminded that any grading or filling of Waters of the United States, including jurisdictional wetlands, is subject to Department of the Army authorization. State and local authorizations may also be required to conduct activities in the locations. In addition, the Interstate Land Sales Full Disclosure Act may require that prospective buyers be made aware, by the seller, of the Federal authority over any waters of the United States, including jurisdictional wetlands, being purchased.

This delineation has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA (United States Department of Agriculture) program participants, or anticipate participation in USDA programs, you should request a certified wetland delineation from the local office of the Natural Resources Conservation Service prior to starting work.

A copy of this JD letter has been forwarded to the Maryland Department of the Environment for their information. If you have any questions concerning this matter, please call Rod Schwarm of this office at 410-820-8550.

Sincerely,

  
Per Walter Washington, Jr.  
Chief, Maryland Section Southern

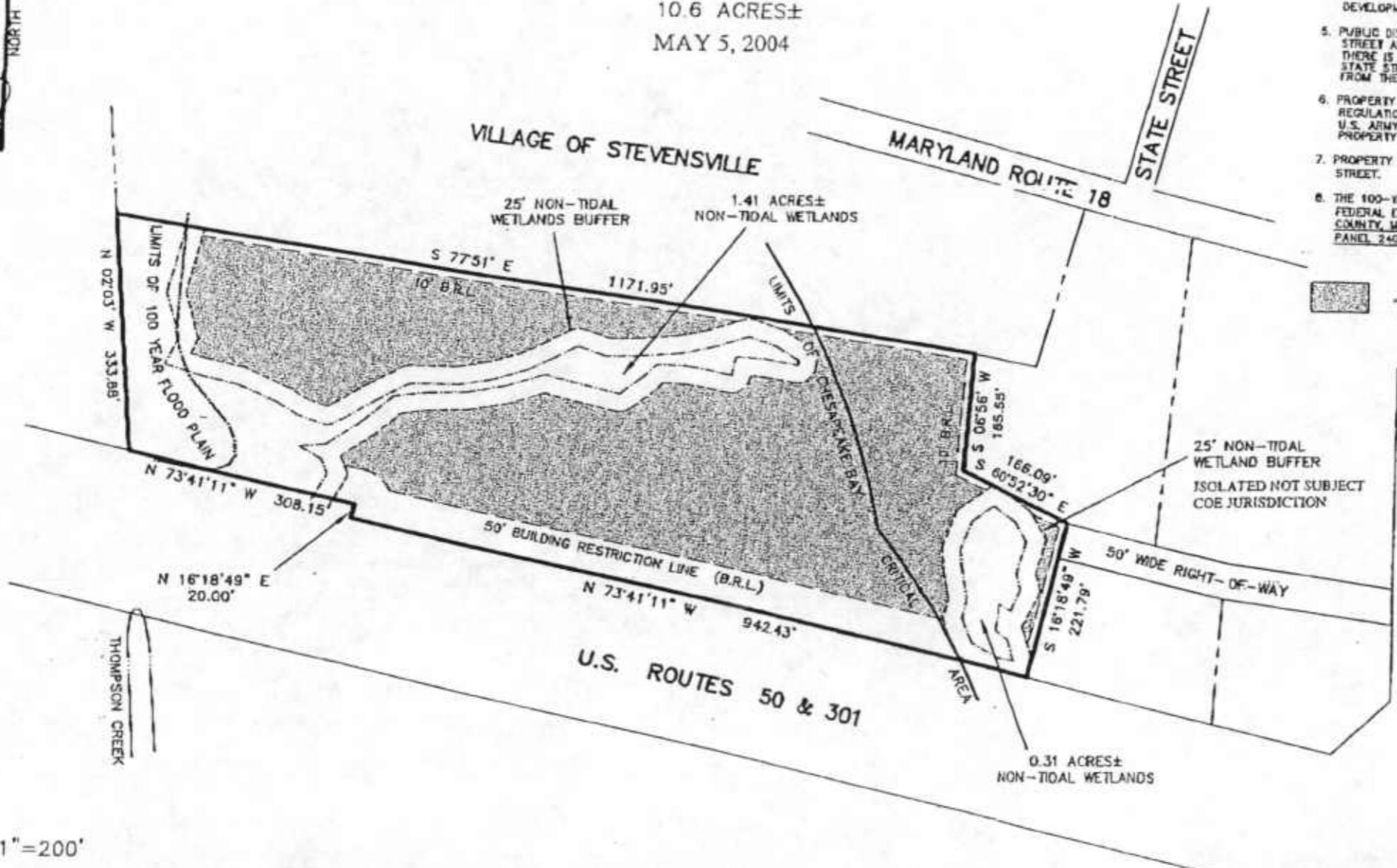


**SPECIAL FEATURES PLAT**  
 OF THE LANDS OF  
**EDWARD S. STOLARZ**  
 FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

10.6 ACRES±  
 MAY 5, 2004

1. THE PROPERTY METES AND BOUNDS SHOWN HEREON ARE PURSUANT TO THE TITLE DEED RECORDED IN C.W.C. LIBER 32, FOLIO 628 AND IS NOT THE RESULT OF A CURRENT FIELD RUN SURVEY.
2. PROPERTY LOCATED IN QUEEN ANNE'S COUNTY, FOURTH ELECTION DISTRICT, TAX MAP 58, BLOCKS 5-6, PARCEL 250, 10.6 ACRES±.
3. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF REVIEW OF AN ABSTRACT OF TITLE.
4. THE PROPERTY IS ZONED URBAN COMMERCIAL (UC) BY THE QUEEN ANNE'S COUNTY, DEPARTMENT OF PLANNING AND ZONING, WHILE THE 8.8 ACRES± PORTION IN THE CHESAPEAKE BAY CRITICAL AREA IS DESIGNATED INTENSE DEVELOPMENT AREA (IDA).
5. PUBLIC DISPOSAL OF SEWAGE EFFLUENT EXISTS ALONG MARYLAND ROUTE 18, DUKE STREET AND THE PROPERTY'S SHARED RIGHT-OF-WAY FROM DUKE STREET. THERE IS A PUBLIC POTABLE WATER MAIN AT MARYLAND ROUTE 18 AND STATE STREET. SEWER AND WATER ALLOCATIONS CAN BE NEGOTIABLE FROM THESE SOURCES.
6. PROPERTY WETLANDS FIELD DELINEATED BY ENVIRONMENTAL REGULATIONS CONSULTANT, INC. ON 14 APRIL 1999 WERE APPROVED BY THE U.S. ARMY CORPS OF ENGINEERS ON MAY 1999 AND OCCUPY 1.7 PROPERTY ACRES.
7. PROPERTY IS ACCESSED ONLY VIA A SHARED RIGHT-OF-WAY FROM DUKE STREET.
8. THE 100-YEAR FLOOD PLAIN SHOWN HERE IS PURSUANT TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY, 1992 QUEEN ANNE'S COUNTY, MD UNINCORPORATED AREAS FLOOD INSURANCE RATE MAP, PANEL 240054 0038 G, AND THEREFORE APPROPRIATE.

 = APPROXIMATELY 7.5 ACRES BUILDABLE AREA



**JURISDICTIONAL DETERMINATION  
 VERIFICATION MAP**  
 FOR: EDWARD STOLARZ  
 CENAB-OP-RMS200401303-13  
 COE SIGNATURE *Rod Shu* DATE: 11/11/04  
 U.S. ARMY ENGINEER DISTRICT, BALTIMORE

ENVIRONMENTAL REGULATIONS CONSULTANT, INC.  
 P.O. BOX 298  
 ST. MICHAELS, MARYLAND  
 (410) 745-2875

SCALE 1"=200'

301-07

**Johnson, Marshall**

---

**From:** Christina Clark [cclark@mccrone-inc.com]  
**Sent:** Friday, December 28, 2007 9:11 AM  
**To:** Johnson, Marshall  
**Cc:** 'Holly Tompkins'; 'leo maier'; Steve Layden  
**Subject:** Juleo, LLC Project, Stevensville, Queen Anne's County

Marshall:

We are in receipt of a comment letter from the County on the Juleo, LLC project dated December 11, 2007 (attached). In that letter, you identify that there is a Critical Area violation on the site per a letter dated March 5, 2007. No other comments are provided on the project on behalf of the Critical Area Commission. We have a settlement letter signed by the County and Mr. Maier has made payment to the County of the fee in lieu of mitigating on-site – both the letter and receipt are attached to this email as pdfs. Based on the submittal of the information contained in this email, we would request a review of the information that was submitted to your office by the County in November 2007 for the project. Please let me know if you have questions. Thank you.

*Christina Pompa Clark, AICP*  
*Assistant Branch Manager*  
*McCrone, Inc.*  
*207 N. Liberty Street*  
*Centreville, MD 21617*  
*410-758-2237 phone*  
*410-758-2464 fax*  
*cclark@mccrone-inc.com*

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CONFIDENTIALITY NOTICE: This message and any attachment(s) are intended solely for the use of the individual or entity to which it is addressed. It may contain information that is privileged, confidential, and exempt from disclosure under applicable law. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, immediately contact the sender by email and destroy all copies of the original message.

ELECTRONIC FILE TRANSFER DISCLAIMER: The enclosed electronic media is provided to RECIPIENT for no purpose other than as a convenience. In using it, modifying it or accessing information from it, RECIPIENT is responsible for confirmation, accuracy and checking of the data from the media. McCRONE hereby disclaims any and all responsibility from any results obtained in use of this electronic media and does not guarantee any accuracy of the information. These electronic files are not construction or record documents. Differences may exist between these electronic files and corresponding hard-copy construction or record documents. We make no representation regarding the accuracy or completeness of the electronic files received. In the event that a conflict arises between the signed or sealed hard-copy documents prepared by us and the electronic files, the signed or sealed hard-copy documents shall govern. RECIPIENT is responsible for determining if any conflict exists. RECIPIENT understands the automated conversion of the information and data from the system and format used by McCRONE to an alternate system or format cannot be accomplished without the possibility of introduction of inaccuracies, anomalies and errors. RECIPIENT agrees to assume all risk associated therewith, and to the fullest extent permitted by law, to hold harmless and indemnify McCRONE from and against all claims, liabilities, losses, damages and cost, including but not limited to attorney's fees, arising therefrom or in connection therewith.

LAW OFFICES  
**FOSTER, BRADEN & THOMPSON**

L.L.P.  
STEVENSVILLE CENTER  
108 EAST MAIN STREET  
SUITE 203  
STEVENSVILLE, MARYLAND 21888  
410-643-4000

MICHAEL R. FOSTER  
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MICHAEL-ANNE T. MUNDY  
E. SEAN FOLTRACK  
MARLA STEWART OWOZAREK

FACSIMILE  
410-643-6820  
E-MAIL  
www.fbtlawyers.com

April 5, 2007

**VIA FACSIMILE 410-758-0032**

Christopher F. Drummond, Esquire  
119 Lawyers Row  
Centreville, MD 21617

**VIA FACSIMILE 410-758-3972**

James H. Barton, III, Zoning Administrator  
Queen Anne's County Department of Planning & Zoning  
160 Coursevall Drive  
Centreville, MD 21617

Re: Juleo, LLC (Leo Maier) Property  
Queen Anne's County Tax Map No.: 56, Parcel 250

Dear Messrs. Drummond and Barton:

I am happy to report that my client has approved a final resolution on issues relating to the tree clearing and grading permit on the above captioned property upon the following terms and conditions as previously discussed:

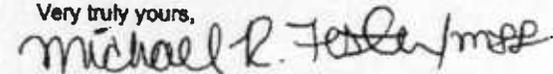
1. Clearing Calculations - The cover sheet of the plan will clearly reflect the area where trees were cleared, which must be less than 40,000 sq. ft.
2. Resulting Impervious Surface - The resulting impervious surface following road construction will be reflected which must be below the 10% threshold for site plans contained in §18:1-139.
3. Tree Replacement or Payment in Lieu Of - Though I maintain that §14:1-28(B) does not require reforestation, in order to resolve this matter, we will agree as follows:
  - A. On-Site - If Planning and Zoning, in consultation with my client, determines it feasible, my client will reforest on site with 112 four (4) to six (6) foot tall trees.
  - B. Payment in Lieu Of - If Planning and Zoning, in consultation with my client, determines that it is not feasible to locate on site because of site plan or building permit reforestation requirements (on site), he may elect to tender a payment in lieu of on site mitigation which totals \$3,920.00 (112 trees x \$35.00 = \$3,920.00). Juleo, LLC agrees to post a letter of credit or bond to guarantee afforestation or payment in lieu of afforestation in the amount of \$3,920.00 prior to receiving his grading permit. A determination will be made by the Department of Planning & Zoning whether or not it is feasible to afforest on site, such determination being made before the end of the current planting season in 2007. In making this determination, the Department of Planning & Zoning shall take into consideration on site afforestation requirements that may be required on any proposed or pending site plan.

4. Permit Approval - Your office will promptly issue a permit for grading, as currently applied for, provided sureties are posted.
5. Civil Citation - The pending civil citation will be dismissed with prejudice.
6. Site Plan / Building Permit - The tree clearing to date will not be calculated against or reduce or in any way impair the 20% (or greater as may be approved by the director of Planning & Zoning) tree clearing allowance under §14:1-37(E)(3). We understand that the Critical Area Commission may adopt a different point of view on this issue.

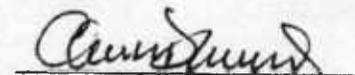
Notwithstanding the above, it is the understanding between the parties that this agreement is binding on the applicant, Juleo, LLC, its heirs and assigns and Queen Anne's County.

I have provided a space below for an acknowledgment for both of you to sign. Please execute the same and return to my office as soon as possible.

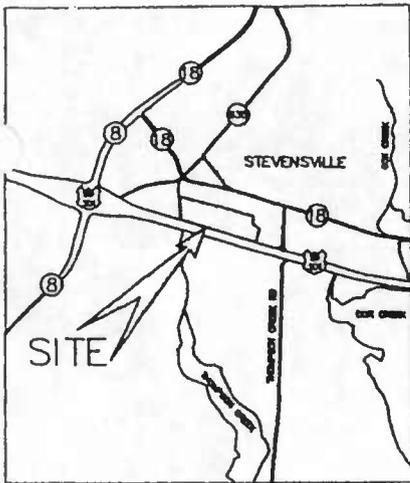
Very truly yours,

  
Michael R. Foster

MRF/mlf

  
Christopher F. Drummond, Esquire  
Attorney for Queen Anne's County  
Department of Planning & Zoning

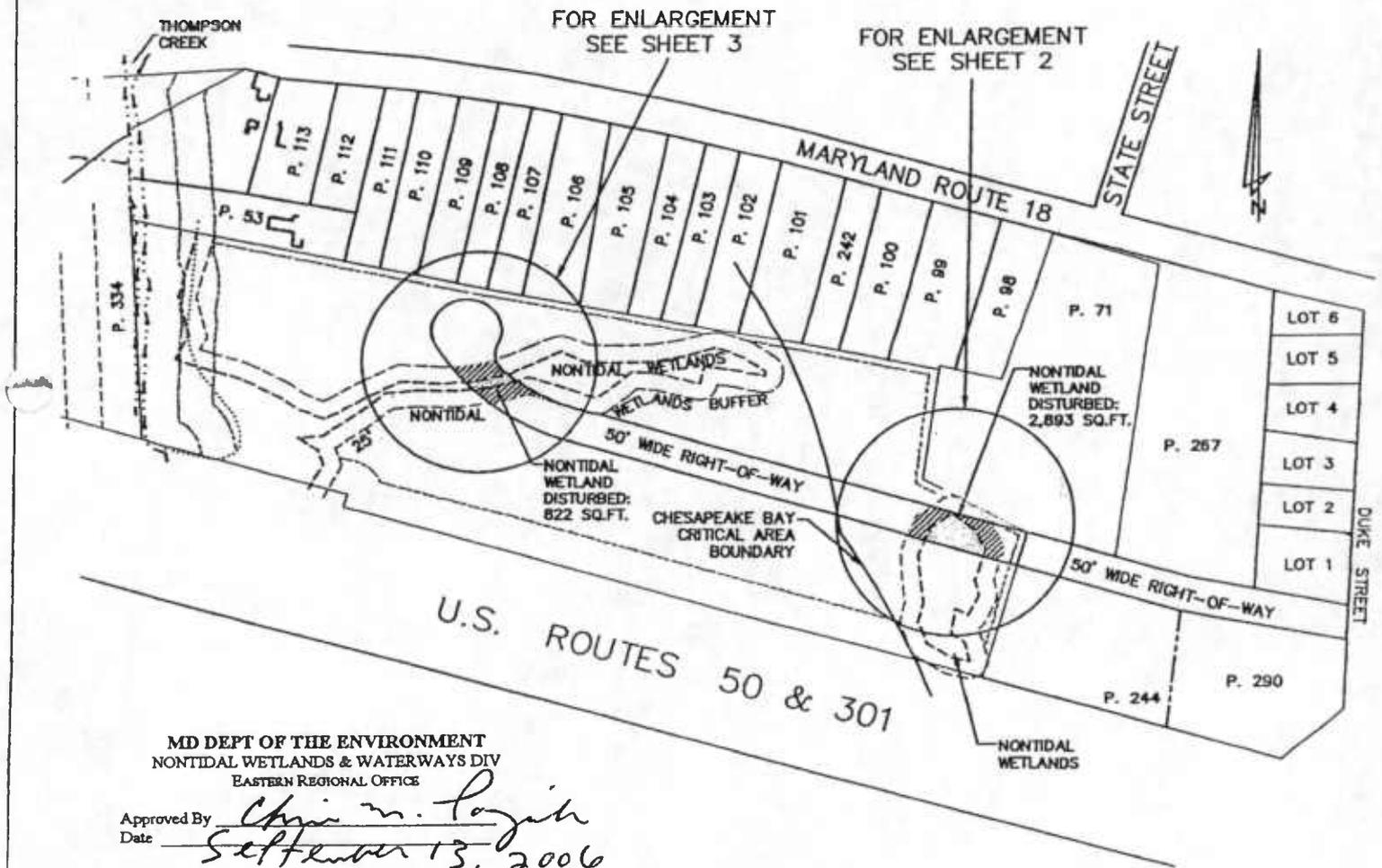
  
James H. Barton, III, Zoning Administrator  
Queen Anne's County Department of  
Planning & Zoning



VICINITY MAP

AREA OF NONTIDAL WETLANDS TO BE DISTURBED  
 AREA = 0.085 AC ± (3,715 sq. ft.)

AREA OF NONTIDAL WETLANDS BUFFER TO BE DISTURBED  
 AREA = 0.228 AC ± (9,953 sq. ft.)



PERMIT  
 TO FILL/DISTURB  
 NONTIDAL WETLANDS  
 ON THE LANDS OF  
 JULED, LLC

FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
 PREPARED FOR: JULED, LLC  
 DATED: JANUARY 21, 2006  
 REVISED: JULY 27, 2006

SCALE: 1"=250'

SHEET 1 OF 4

**McCRONE**  
 ENGINEERING • ENVIRONMENTAL SCIENCES  
 LAND PLANNING & SURVEYING  
 CONSTRUCTION SERVICES  
 207 NORTH LIBERTY STREET  
 SUITE 100  
 CENTREVILLE, MARYLAND  
 (410) 758-2237

Approved By *Chris M. Fajole*  
Date *September 13, 2006*

NONTIDAL  
WETLAND  
DISTURBED:  
2,893 SQ.FT.

50' WIDE RIGHT-OF-WAY

NONTIDAL  
WETLANDS

25' NONTIDAL  
WETLAND BUFFER  
DISTURBED:  
3,225 SQ.FT.

GRAPHIC SCALE



1 inch = 60 ft.



DENOTES AREA OF NONTIDAL WETLANDS  
TO BE FILLED/DISTURBED  
AREA = 0.066 AC.± (2,893 sq. ft.)



DENOTES AREA OF NONTIDAL WETLANDS  
BUFFER TO BE FILLED/DISTURBED  
AREA = 0.074 AC.± (3,225 sq. ft.)

PERMIT  
TO FILL/DISTURB  
NONTIDAL WETLANDS  
ON THE LANDS OF  
JULEO, LLC

FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

PREPARED FOR: JULEO, LLC

DATED: JANUARY 21, 2006

REVISED: JULY 27, 2006

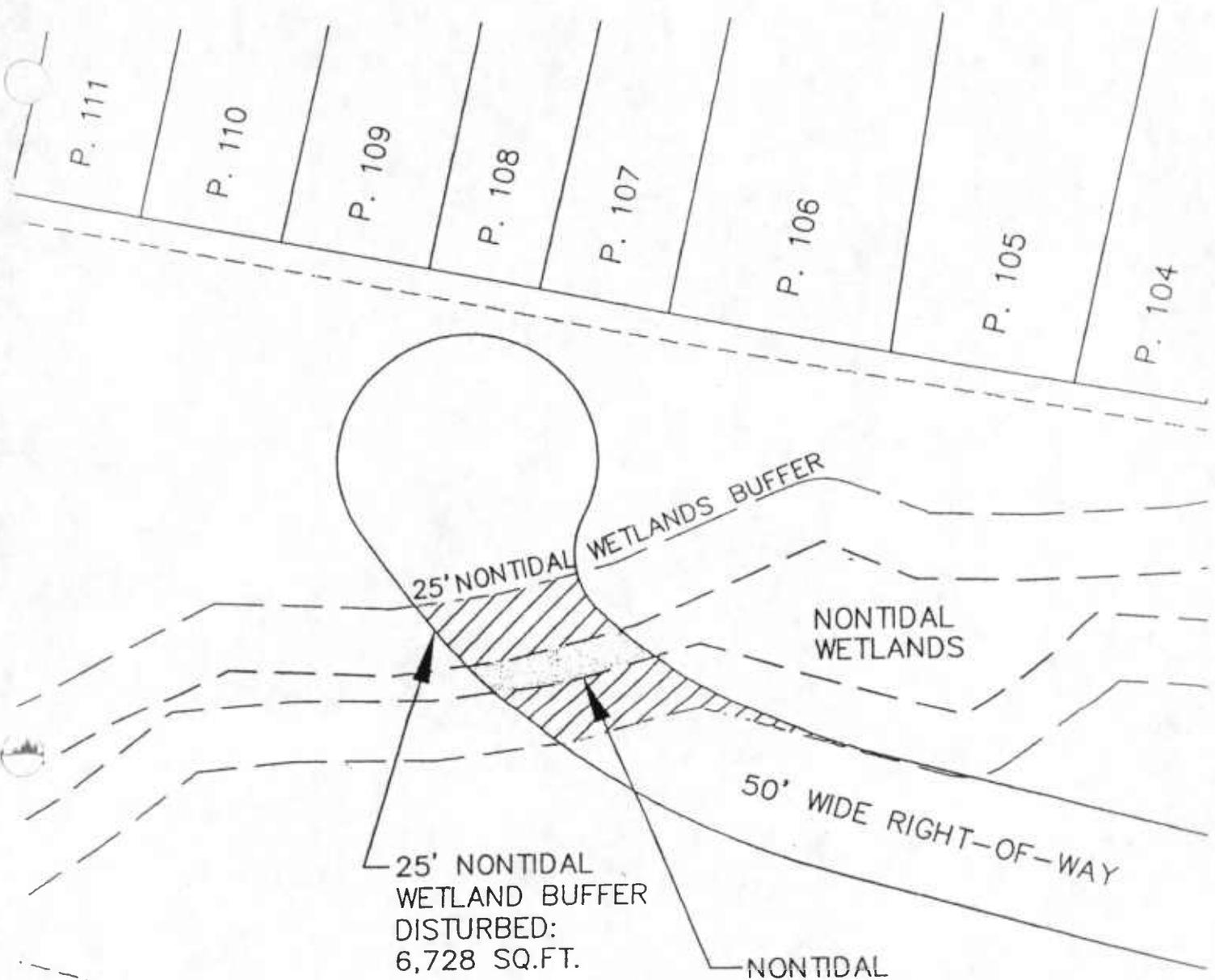
SHEET 2 OF 4

**McCRONE**

ENGINEERING • ENVIRONMENTAL SCIENCES  
LAND PLANNING & SURVEYING  
CONSTRUCTION SERVICES

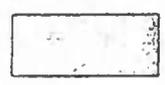
207 NORTH LIBERTY STREET  
SUITE 100  
CENTREVILLE, MARYLAND  
(410) 758-2237

SCALE: 1"=60'



25' NONTIDAL WETLAND BUFFER DISTURBED: 6,728 SQ.FT.

NONTIDAL WETLAND DISTURBED: 822 SQ.FT.



DENOTES AREA OF NONTIDAL WETLANDS TO BE FILLED/DISTURBED  
AREA = 0.019 AC.± (822 sq. ft.)



DENOTES AREA OF NONTIDAL WETLANDS BUFFER TO BE FILLED/DISTURBED  
AREA = 0.154 AC.± (6728 sq. ft.)

MD DEPT OF THE ENVIRONMENT  
NONTIDAL WETLANDS & WATERWAYS DIV.  
EASTERN REGIONAL OFFICE

Approved By Chaim M. Legish  
Date September 13, 2004

PERMIT  
TO FILL/DISTURB  
NONTIDAL WETLANDS  
ON THE LANDS OF  
JULEO, LLC

FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
PREPARED FOR: JULEO, LLC  
DATED: JANUARY 21, 2006  
REVISED: JULY 27, 2006

SHEET 3 OF 4

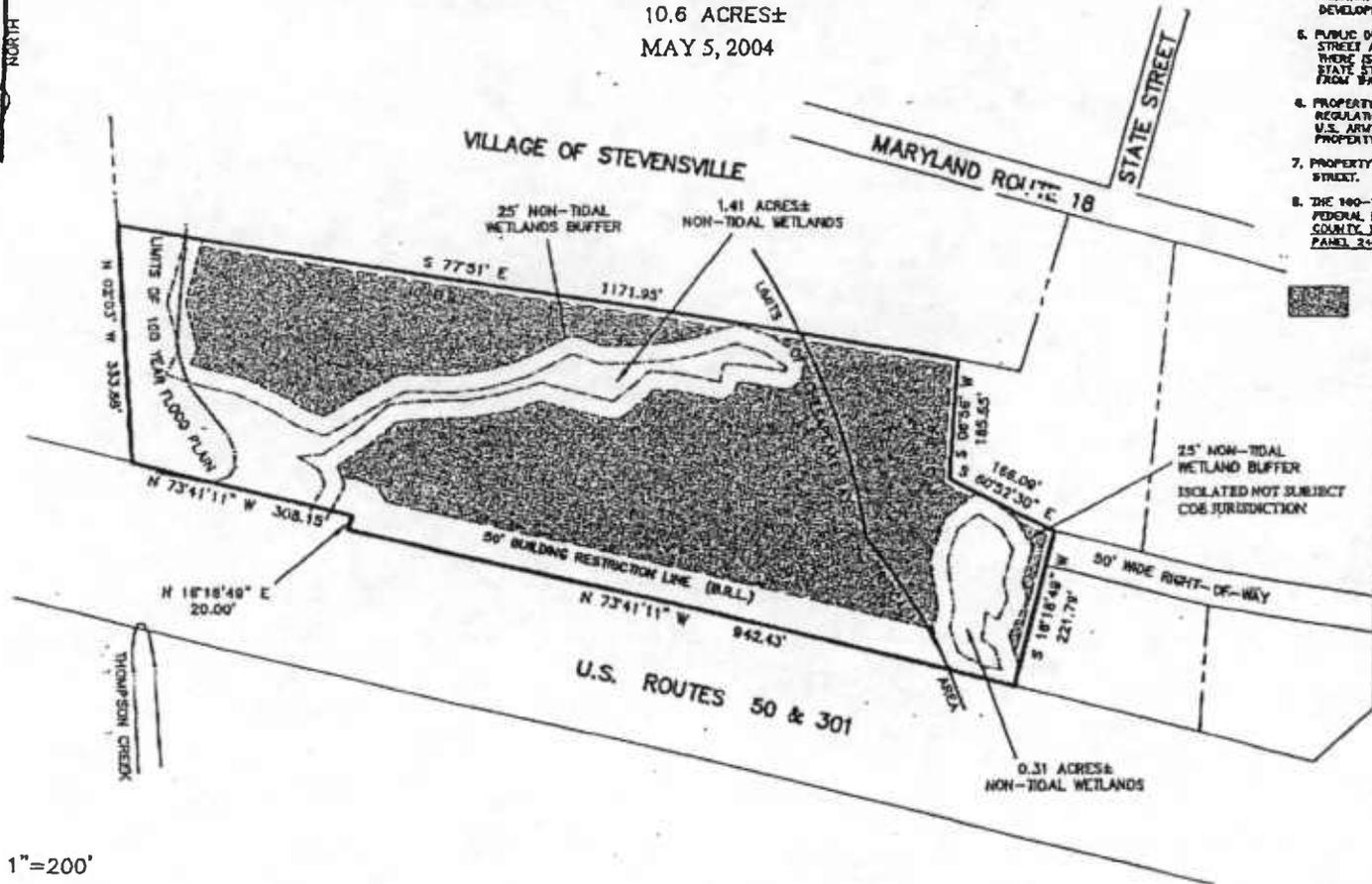
**McCRONE**  
ENGINEERING • ENVIRONMENTAL SCIENCES  
LAND PLANNING & SURVEYING  
CONSTRUCTION SERVICES  
207 NORTH LIBERTY STREET  
SUITE 100  
CENTREVILLE, MARYLAND  
(410) 758-2237

SCALE: 1"=60'

# SPECIAL FEATURES PLAT

OF THE LANDS OF  
**EDWARD S. STOLARZ**  
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

10.6 ACRES±  
MAY 5, 2004



1. THE PROPERTY METES AND BOUNDS SHOWN HEREIN ARE PURSUANT TO THE TITLE DEED RECORDED IN C.W.C. LIBER 32, FOLIO 628 AND IS NOT THE RESULT OF A CURRENT FIELD RUN SURVEY.
2. PROPERTY LOCATED IN QUEEN ANNE'S COUNTY, FOURTH ELECTION DISTRICT, TAX MAP 58, BLOCKS 3-6, PARCEL 254, 10.6 ACRES±.
3. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF REVIEW OF AN ABSTRACT OF TITLE.
4. THE PROPERTY IS ZONED URBAN COMMERCIAL (UC) BY THE QUEEN ANNE'S COUNTY, DEPARTMENT OF PLANNING AND ZONING. WHILE THE 6.8 ACRE± PORTION IN THE CHESAPEAKE BAY CRITICAL AREA IS DESIGNATED INTERSECT DEVELOPMENT AREA (IDA).
5. PUBLIC DISPOSAL OF SEWAGE EFFLUENT EXISTS ALONG MARYLAND ROUTE 18, DUKE STREET AND THE PROPERTY'S SHARED RIGHT-OF-WAY FROM DUKE STREET. THERE IS A PUBLIC POTABLE WATER MAIN AT MARYLAND ROUTE 18 AND STATE STREET. SCENES AND WATER ALLOCATIONS CAN BE NEGOTIABLE FROM THESE SOURCES.
6. PROPERTY WETLANDS FIELD DELINEATED BY ENVIRONMENTAL REGULATIONS CONSULTANT, INC. ON 14 APRIL, 1998 WERE APPROVED BY THE U.S. ARMY CORPS OF ENGINEERS ON MAY 1998 AND OCCUPY 1.7 PROPERTY ACRES.
7. PROPERTY IS ACCESSED ONLY VIA A SHARED RIGHT-OF-WAY FROM DUKE STREET.
8. THE 100-YEAR FLOOD PLAN SHOWN HEREIN IS PURSUANT TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY, 1992 QUEEN ANNE'S COUNTY, MD UNINCORPORATED AREAS FLOOD INSURANCE RATE MAP, PANEL 3-40054-0032 G, AND THEREFORE APPROXIMATE.

■ - APPROXIMATELY 7.5 ACRES BUILDABLE AREA

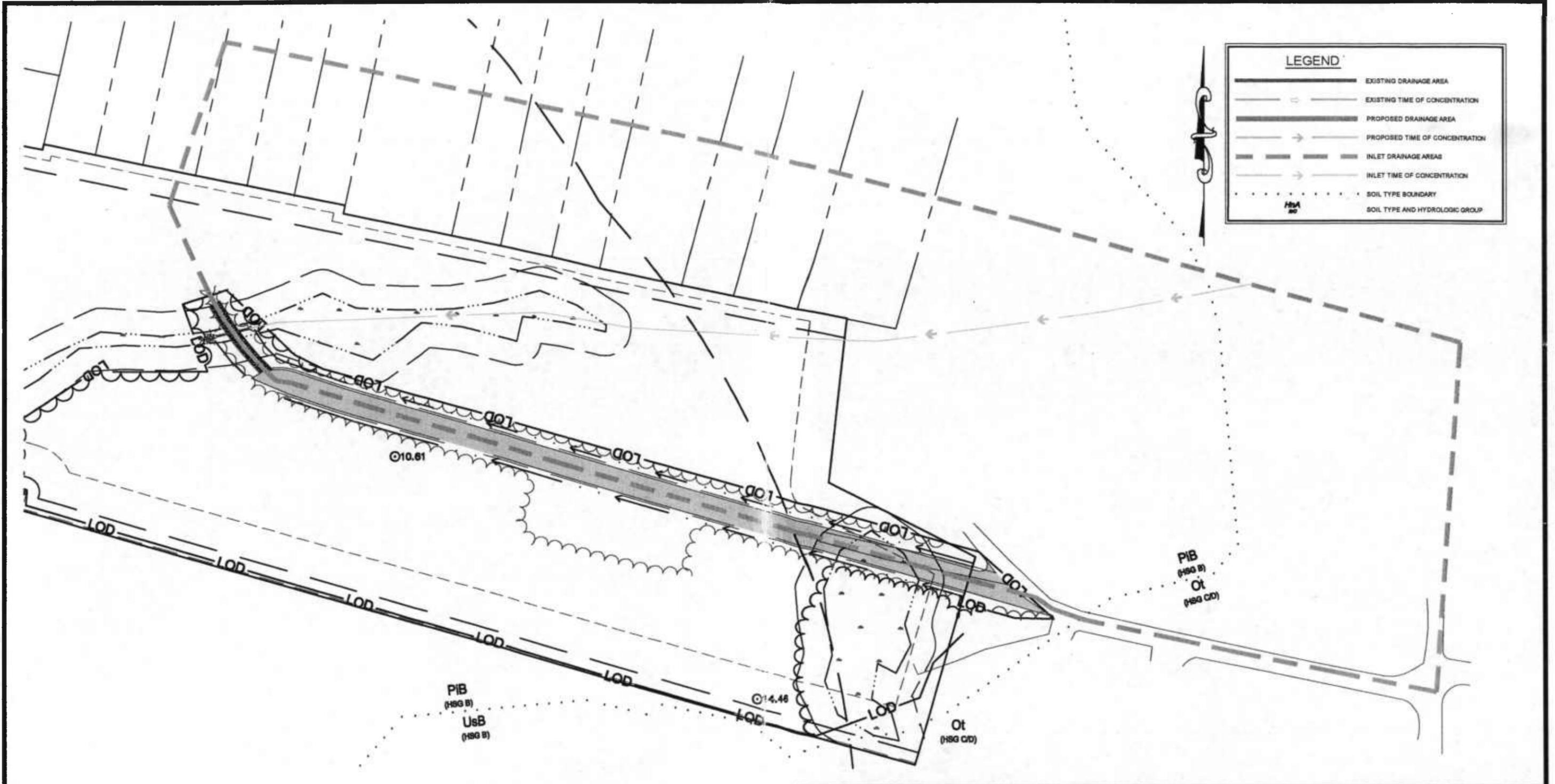
**JURISDICTIONAL DETERMINATION  
VERIFICATION MAP**  
FOR: EDWARD STOLARZ  
CENAB-OP-RMS200401363-13  
COE SIGNATURE *Red Sky* DATE: 11/14/04  
U.S. ARMY ENGINEER DISTRICT, BALTIMORE

ENVIRONMENTAL REGULATIONS CONSULTANT, INC.  
P.O. BOX 298  
ST. MICHAELS, MARYLAND  
(410) 745-2875

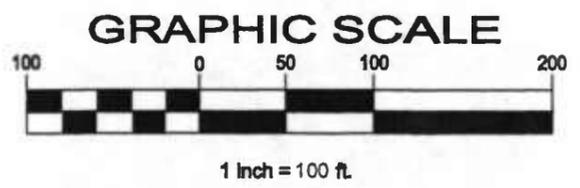
SCALE 1"=200'

Q:\D1050429-Juleo\dwg\Engineering\D1050429-DA-CULV.dwg.....Tab:11x17 - SIDE

PLOTTED: Jan 19, 2007 - 11:50am

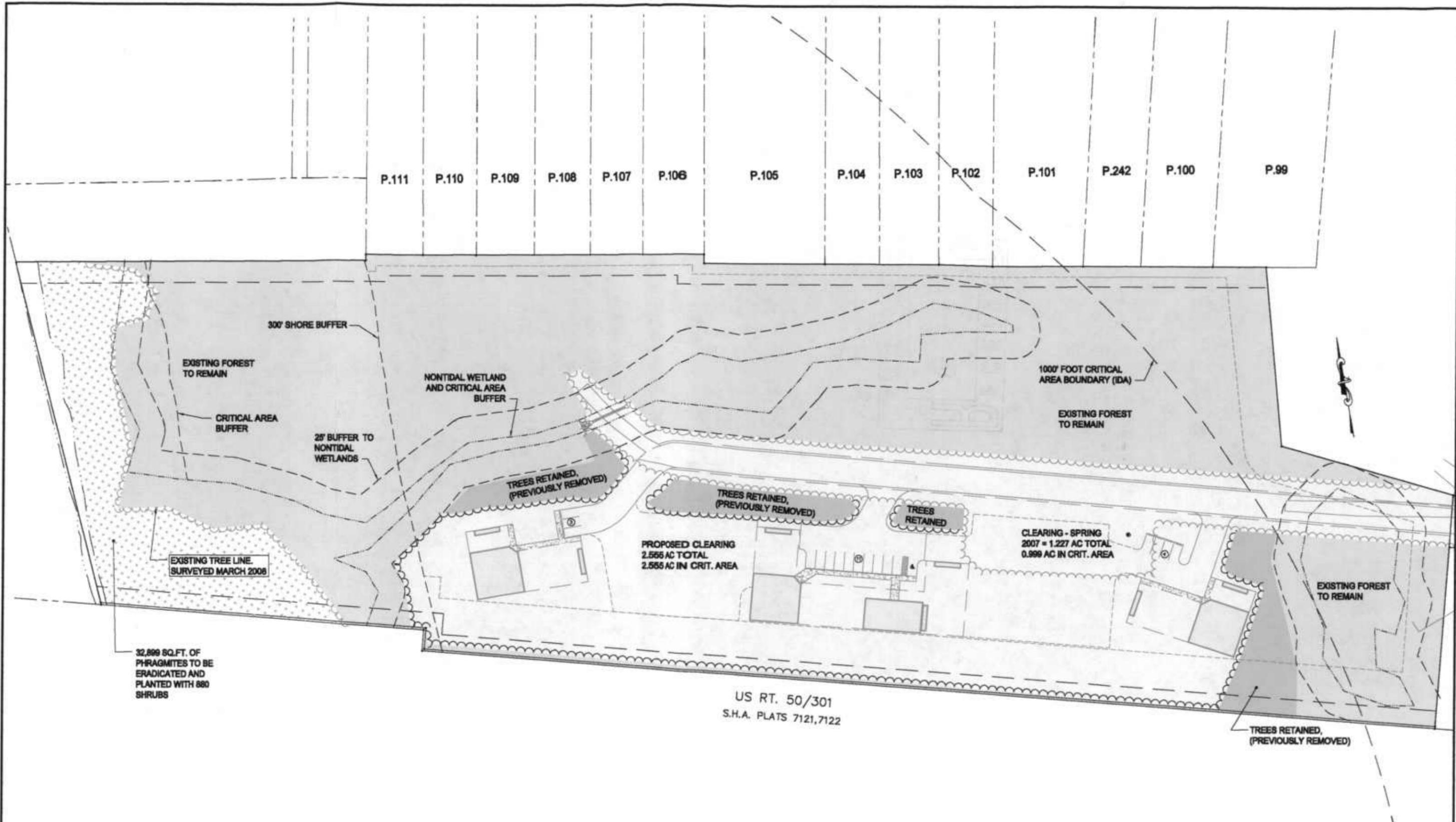


LEGEND	
	EXISTING DRAINAGE AREA
	PROPOSED DRAINAGE AREA
	EXISTING TIME OF CONCENTRATION
	PROPOSED TIME OF CONCENTRATION
	INLET DRAINAGE AREA
	INLET TIME OF CONCENTRATION
	SOIL TYPE BOUNDARY
	SOIL TYPE AND HYDROLOGIC GROUP



<b>CULVERT DRAINAGE AREA</b>		SHEET NO.: DA-03	
FOR <b>JULEO LLC</b> FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MD PREPARED FOR: JULEO LLC		DATE: SEPT. 2006	SCALE: 1"=100'
 • Engineering • Environmental Sciences • Construction Services • Land Planning & Surveying ANNAPOLIS • CENTREVILLE • DOVER • ELKTON • SALISBURY 207 NORTH LIBERTY STREET CENTREVILLE, MARYLAND 21617 (410) 788-8237 • FAX (410) 788-3484 www.mccrone-inc.com Copyright 2006		JOB NUMBER: D1050429	DRAWN BY: LNJ
		FOLDER REF: 324	DESIGNED BY: LNJ
		APPROVED BY: SEL	

PLOTTED: Apr 09, 2008 - 10:09pm  
 C:\01050428-Juleo\dwg\Engineering\01050428\_Tree Exhibit.dwg - Tab Tree Exhibit



32,899 SQ.FT. OF PHRAGMITES TO BE ERADICATED AND PLANTED WITH 880 SHRUBS

US RT. 50/301  
S.H.A. PLATS 7121,7122



APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
S.A. OR DEPT. OF PUBLIC WORKS

APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
S.A. OR SOIL CONSERVATION SERVICE

REVISIONS		DATE
REV. #	DATE	DESCRIPTION

DATE: APRIL 2007  
JOB NUMBER: D1050428  
SCALE: NO SCALE  
DRAWN BY: S.E.L.  
DESIGNED: S.E.L.  
APPROVED: S.E.L.  
FOLDER REFERENCE: 224  
SEAL: \_\_\_\_\_  
DATE: \_\_\_\_\_

**McCRONE**

• Engineering • Environmental Sciences  
 • Construction Services • Land Planning & Surveying

ANNAPOLIS • CENTREVILLE • DOVER • ELKTON • SALISBURY

807 NORTH LIBERTY STREET  
CENTREVILLE, MARYLAND 21031  
(410) 700-0007 • FAX (410) 700-0008

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TREELINE EXHIBIT

FOR:  
**JULEO, LLC**

FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

TAX MAP - 55, GRID - 8, PARCEL - 250, PARCEL 1

PREPARED FOR: JULEO, LLC

SHEET NO:  
**1 of 1**

FILE NO:  
D1050428\_Tree Exhibit.dwg

RECEIVED  
APR 9 2008  
QUEEN ANNE'S COUNTY  
LAND USE, GROWTH MGT & ENVRMT



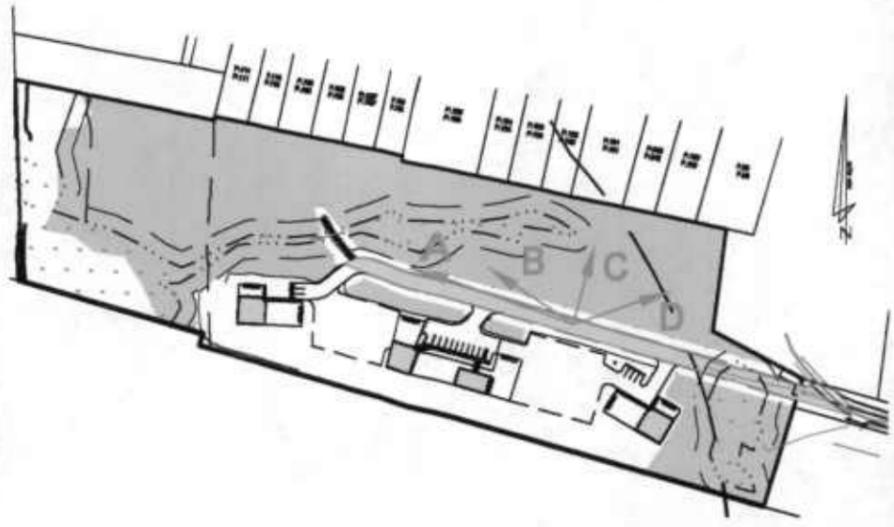
**VIEW A: ZONING BUFFER LOOKING WEST (LONGER SHOT)**



**VIEW B: ZONING BUFFER LOOKING NORTHWEST**



**VIEW C: ZONING BUFFER LOOKING NORTH**



**PHOTO LOCATION MAP**

**NOTE: ALL PHOTOS TAKEN FROM THE CENTER OF THE SITE ON THE EXISTING DRIVEWAY. NO NEW CLEARING WILL BE OCCURING TO THE NORTH OF THE DRIVEWAY.**



**VIEW D: ZONING BUFFER LOOKING NORTHEAST**

ZONING BUFFER PHOTOS		FILE NAME: Zoning Buffer Exhibit.DWG	SHEET NO.: 1 OF 1	
FOR <b>JULEO, LLC</b> FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND PREPARED FOR: JULEO, LLC		● Engineering ● Environmental Sciences ● Construction Services ● Land Planning & Surveying ANNAPOLIS ● CENTREVILLE ● DOVER ● ELKTON ● SALISBURY 207 NORTH LIBERTY STREET CENTREVILLE, MARYLAND 21617 (410) 758-2237 * FAX (410) 758-2454 <small>www.mccrone-4ns.com Copyright 2008</small>	DATE: JAN. 2008	SCALE: NONE
			JOB NUMBER: D1050429	DRAWN BY: LS
		FOLDER REF: 324	DESIGNED BY: JSK	
			APPROVED BY: SEL	

# SITE PLAN AND CONSTRUCTION DRAWINGS

ON THE LANDS OF

# JULEO, LLC

FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
PREPARED FOR: JULEO, LLC.



NOT FOR CONSTRUCTION  
PENDING AGENCY APPROVAL

### LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	---	---
SETBACK LINE	---	---
PROPERTY CORNER (TYPE NOT SPECIFIED)	○	○
BENCH MARK	▲ ELEV. 100.00	
MAJOR CONTOUR	---25---	---25---
MINOR CONTOUR	---24---	---24---
ROAD CENTERLINE	---	---
EDGE OF PAVEMENT	---	---
PAVEMENT HATCH	[Hatch Pattern]	[Hatch Pattern]
EDGE OF GRAVEL	---	---
GRAVEL HATCH	[Hatch Pattern]	[Hatch Pattern]
BUILDING OUTLINE	---	---
BUILDING SOLID FILL	[Solid Fill]	[Solid Fill]
SIDEWALK	---	---
SIDEWALK HATCH	[Hatch Pattern]	[Hatch Pattern]
CONCRETE	---	---
SIGN	---	---
SOIL BORING	○	○
WETLAND HATCH	[Hatch Pattern]	[Hatch Pattern]
WETLAND BUFFER	---	---
FLOOD PLAIN	---	---
STORM PIPE	---	---
RIP RAP	[Hatch Pattern]	[Hatch Pattern]
SANITARY MANHOLE	○	○
SANITARY CLEANOUT	○ CO	○ CO
SANITARY PIPE	---	---
WATER PIPE	---	---
FIRE HYDRANT	⊕	⊕
WELL	⊕	⊕
OVERHEAD ELECTRIC	---	---
UTILITY POLE	⊕	⊕
ELEC. JCT./SERVICE BOX	⊕ ELEC	⊕ ELEC
GUY WIRE	---	---
LIGHT POLE	⊕	⊕
TELEPHONE PEDESTAL	⊕	⊕
DECIDUOUS TREE	[Tree Symbol]	[Tree Symbol]
CONIFEROUS TREE	[Tree Symbol]	[Tree Symbol]
TREE/SHRUB/BRUSH LINE	---	---
FOREST RETENTION BOUNDARY	---	---
TREE PROTECTION FENCE	---	---

### GENERAL NOTES

- THE EXISTING UTILITIES SHOWN WERE TAKEN FROM THE BEST AVAILABLE RECORDS. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE INCURRED TO SUCH UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION AND SHALL COORDINATE CONSTRUCTION WITH THE UTILITY COMPANIES INVOLVED:
 

DELMARVA POWER	1-410-759-0830
MISS UTILITY	1-800-441-8355
MC CRONE, INC.	1-410-758-2237
MARYLAND DEPARTMENT OF ENVIRONMENT	1-410-901-4020
QUEEN ANNE'S COUNTY DEPT. OF PUBLIC WORKS	1-410-758-8525
QUEEN ANNE'S COUNTY SANITARY DISTRICT	1-410-643-3535
VERIZON	1-410-778-8010
- THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, LABOR, AND MATERIALS FOR ANY MISCELLANEOUS OR TEST PIT EXCAVATIONS REQUIRED BY THE ENGINEER. CONTRACTOR SHALL TEST PIT TO CONFIRM THE ACTUAL LOCATION OF ANY AND ALL EXISTING SANITARY DISTRICT FACILITIES AT EACH AND EVERY CROSSING AND TIE-IN.
- ALL CONSTRUCTION SHALL BE MARKED FOR TRAFFIC AND PEDESTRIAN SAFETY. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH SECTION VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS AND QUEEN ANNE'S COUNTY DISTRICT.
- THE CONTRACTOR ASSUMES ALL RESPONSIBILITIES FOR ANY DEVIATIONS FROM THESE PLANS, UNLESS SAID DEVIATION IS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL RECEIVE WRITTEN PERMISSION FROM THE ENGINEER IF A DEVIATION OF THE PLAN IS NECESSARY.
- ALL DISTURBED AREAS SHALL BE SMOOTHLY GRADED TO PROVIDE POSITIVE DRAINAGE IN THE DIRECTION OF FLOW ARROWS HEREIN AND STABILIZED WITH TOPSOIL, SEED, AND MULCH. IF SETTLEMENT OCCURS, TOPSOIL, SEEDING AND MULCHING SHALL BE REPEATED UNTIL SETTLEMENT SUBSIDES (SEE EROSION AND SEDIMENT CONTROL SPECIFICATIONS).
- ALL TRASH, TREES, DEMOLITION DEBRIS, AND UNDERBUSH ARE TO BE CLEARED AND REMOVED OFF SITE TO AN APPROVED DUMP SITE BY THE CONTRACTOR.
- ANY EXCESS EXCAVATED MATERIAL PLACED OUTSIDE OF THOSE AREAS DESIGNATED ON THIS PLAN SHALL MEET APPROVAL OF QUEEN ANNE'S COUNTY SOIL CONSERVATION AND ENGINEER.
- ANY EXISTING SURVEY MONUMENTATION THAT IS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A REGISTERED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- ALL FILL AREAS WITHIN LIMITS OF BUILDING AND ROADWAY CONSTRUCTION, AND OTHER AREAS AS DESIGNATED ON THESE PLANS, SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY AND LAD AND COMPACTED IN 6" MAXIMUM LIFTS.
- ALL STORM DRAIN AND SANITARY PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- TRENCHES SHALL NOT REMAIN OPEN OVERNIGHT, IF IT IS NECESSARY FOR TRENCHES TO REMAIN OPEN, STEEL PLATES, CAPABLE OF BEARING TRAFFIC, SHALL BE USED TO COMPLETELY COVER THE TRENCH.
- A MINIMUM OF ONE-WAY TRAFFIC SHALL BE MAINTAINED DURING HOURS OF CONSTRUCTION, AND TWO WAY TRAFFIC AT ALL OTHER TIMES.
- SEE ADDITIONAL SPECIFICATIONS PREPARED JANUARY, 1998, EDITION OF "SPECIFICATIONS FOR CONSTRUCTION OF SEWER COLLECTION, SEWER TRANSMISSION AND WATER DISTRIBUTION LINES", ON FILE WITH THE QUEEN ANNE'S COUNTY SANITARY DISTRICT. IN ADDITION, ALL HARDWARE (I.E. NUTS, BOLTS, WASHERS, RESTRAINING RODS, ETC.) SHALL BE 304 STAINLESS STEEL. CONTRACTOR IS TO REPLACE ANY PLAIN OR GALVANIZED STEEL HARDWARE SUPPLIED BY THE MANUFACTURER, INCLUDING BONNET BOLTS ON DIVISION VALVE, WITH STAINLESS STEEL.
- ALL VALVE BOXES AND VACUUM PITS SHALL BE SET AND ADJUSTED TO GRADE.
- ALL PVC, PE AND HDPE PIPE, OTHER THAN PIPE RUNS BETWEEN GRAVITY SEWER MANHOLES, SHALL HAVE A CONTINUOUS SINGLE STRAND, 8-GAUGE UNCOATED COPPER TRACER WIRE LOCATED BENEATH THE PIPE. THE WIRE SHALL BE STUBBED INTO ALL METER PITS, VACUUM VALVE PITS, CLEANOUTS, AND DIVISION VALVE BOXES.
- INFORMATION PROVIDED IN THESE DRAWINGS IS BASED ON BEST AVAILABLE AS-BUILT INFORMATION. NO GUARANTEE TO THE ACCURACY OF THE LOCATION (HORIZONTAL OR VERTICAL) IS MADE BY THE ENGINEER. CONTRACTOR TO FIELD VERIFY AND TEST PIT AS NEEDED TO VERIFY THE LOCATION OF THE EXISTING UTILITIES. THIS SHALL BE DONE AS PART OF THE CONTRACT FOR THE WORK SHOWN IN THESE DRAWINGS.
- CONTRACTOR IS TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH QUEEN ANNE'S COUNTY ENGINEERS AND OTHER INVOLVED PARTIES AT LEAST TWO (2) WEEKS BEFORE CONSTRUCTION.
- REFER TO TIDAL WETLANDS PERMIT # 200661791/06-NT-2020.

### PARKING CALCULATIONS

18-1-83 C (1)(a) GENERAL BUSINESS (RETAIL):  
1,600 S.F. OF BOAT-RELATED RETAIL x 1 SPACE/350 S.F. = 4.5 spaces

18-1-83 K (4) VEHICLE SALES & SERVICES:  
6,171 S.F. OF BOAT SALES x 1 SPACE/1,500 S.F. = 4.1 spaces

TOTAL REQUIRED PARKING SPACES = 8.6 SPACES  
TOTAL PROPOSED PARKING SPACES = 21 SPACES

TOTAL REQUIRED LOADING SPACES = 1 SPACE  
TOTAL PROPOSED LOADING SPACES = 2 SPACES (GRAVEL BOAT DISPLAY)

### SITE NOTES:

- FOR DEED REFERENCE TO PARCEL, SEE SM 1510/106.
- THE PARCEL IS ZONED UC - URBAN COMMERCIAL.
- PORTIONS OF THIS SITE ARE LOCATED WITHIN THE 100-YEAR FLOODPLAIN ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S F.I.R.M. MAP NUMBER 240054 0038C, REVISED JUNE 16, 1992.
- PORTIONS OF THE SITE ARE LOCATED WITHIN THE CRITICAL AREA, CLASSIFICATION IDA.
- SOILS OF THE SITE CONSIST OF PINEYNECK - PB (HYDROLOGIC SOIL GROUP B), HURLOCK SANDY LOAM - H<sub>r</sub> (HSG B/D), LONGMARSH & ZEKIPI - LZ (HSG D), UNICORN-SASSAFRAS LOAMS - LUB (HSG B), AND OTHELLO SILT LOAM - O<sub>1</sub> (HSG C/D) PER THE SOIL SURVEY OF QUEEN ANNE'S COUNTY DATED 2002.
- THE SITE IS INTENDED TO BE SERVED BY PUBLIC SEWER AND PRIVATE WATER (WELL).
- PROPERTY LINES FOR PARCEL ARE TAKEN FROM A BOUNDARY SURVEY BY MC CRONE, INC. DATED JANUARY 9, 2007.
- HORIZONTAL DATUM IS BASED ON NAD 83/91, AND THE VERTICAL DATUM IS BASED ON NAVD 1988.
- NONTIDAL WETLANDS WERE DELINEATED BY ENVIRONMENTAL REGULATIONS CONSULTANT, INC. ON APRIL 14, 1998. A JURISDICTIONAL DETERMINATION WAS ISSUED BY THE U.S. ARMY CORPS OF ENGINEERS IN MAY 1999 AND REISSUED ON MAY 11, 2004.
- NO DISTURBANCE IS PROPOSED IN THE UPLAND PORTION OF THE SITE, THEREFORE THE PROJECT IS EXEMPT FROM THE REQUIREMENT OF A FOREST CONSERVATION PLAN. SEE SECTION 18-2.4.A(1) OF THE QUEEN ANNE'S COUNTY CODE.
- ACCORDING TO §18-1-22.B OF THE COUNTY CODE, LOW, MEDIUM, AND HIGH COMMERCIAL IS PERMITTED IN THE URBAN COMMERCIAL ZONING DISTRICT. THE DEFINITIONS CONTAINED IN APPENDIX A OF CHAPTER 18 OF THE COUNTY CODE INCLUDE RETAIL AND BOAT SALES AS HIGH AND MEDIUM COMMERCIAL USES. THEREFORE, THE PROPOSED USE OF NEW BOAT SALES AND SERVICE WITH EXTERIOR STORAGE/DISPLAY, IS PERMITTED ON THE SITE.
- THIS SITE IS SERVED BY THE KENT NARROWS, STEVENSVILLE, GRASONVILLE AREA WASTEWATER COLLECTION SYSTEM "A".
- MAXIMUM BUILDING HEIGHT IS 45 FEET AND PROPOSED BUILDING HEIGHT IS 30 FEET.
- MAXIMUM FREESTANDING SIGN SURFACE AREA ALLOWED FOR THIS SITE IS 250 SQUARE FEET. ONE MAIN FREESTANDING SIGN IS PROPOSED TO ADVERTISE THE SITE. ITS DIMENSIONS ARE 9-FT HIGH BY 15-FT WIDE FOR A TOTAL AREA OF 135 SQUARE FEET.
- MAXIMUM WALL OR PROJECTING SIGN SURFACE AREA ALLOWED FOR THIS PROJECT IS 60 SQUARE FEET, PLUS 25% OF THE UNUSED PORTION OF THE FREESTANDING SIGN AREA. THE CREDITED FREESTANDING SIGN AREA IS 250 - 135 = 115 SF AND TAKING 25% OF THIS IS 29 SF. TOTAL ALLOWABLE WALL SIGN AREA IS 60 + 29 = 89 SF. THE ACTUAL NUMBER AND AREA OF WALL SIGNS WILL BE DETERMINED ONCE LEASES FOR THE BUILDINGS ARE SIGNED, BUT SHALL NOT EXCEED AN AGGREGATE OF 89 SF.
- THE EXISTING BILLBOARD SHALL BE REMOVED FROM THE PROPERTY.

### SITE STATISTICS

SITE IS LOCATED ON TAX MAP 56, GRID 6, PARCEL 250, PARCEL NO. 1 FOR DEED REFERENCE, SEE S.M. 1543/340  
CURRENT ZONING IS URBAN COMMERCIAL (UC)  
SITE IS PARTIALLY LOCATED WITHIN THE CRITICAL AREA, DESIGNATION IS IDA  
SITE IS PARTIALLY LOCATED WITHIN THE 100 YEAR FLOODPLAIN  
PROPOSED USE IS BOAT SALES AND BOAT-RELATED RETAIL

	ACTUAL	ROUNDED
GROSS SITE AREA	= 474,346 sq. ft. (10.899 AC.±)	
CRITICAL AREA BASE SITE AREA	= 422,035 sq. ft. (9.689 AC.±)	
UPLAND BASE SITE AREA	= 52,311 sq. ft. (1.200 AC.±)	
TOTAL BASE SITE AREA	= 474,346 sq. ft. (10.899 AC.±)	
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AREA OF WOODLANDS	= 420,620 sq. ft. (9.656 AC.±)	
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EXISTING FLOOR AREA TO BE REMOVED	= 0 sq. ft. (0.000 AC.±)	
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PROPOSED IMPERVIOUS AREA ON SITE	= 87,962 sq. ft. (2.019 AC.±)	
TOTAL PROPOSED IMPERVIOUS AREA	= 106,854 sq. ft. (2.453 AC.±)	
EXISTING LANDSCAPE AREA	= 452,905 sq. ft. (10.397 AC.±)	
REQUIRED LANDSCAPE AREA (20%)	= 94,869 sq. ft. (2.178 AC.±)	
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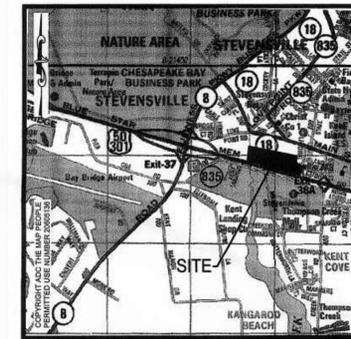
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THE PURPOSE OF THIS MINOR SITE PLAN IS TO RECEIVE MINOR SITE PLAN APPROVAL FROM THE DEPARTMENT OF LAND USE, GROWTH MANAGEMENT AND THE ENVIRONMENT FOR THREE (3) BOAT SALES BUILDINGS TOTALING 6,174 S.F. AND ONE (1) BOAT-RELATED RETAIL BUILDING, TOTALING 1,600 S.F.

### PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

PRINTED NAME: Steve Lichten  
3/1/84  
LICENSE NO. 11669 EXPIRATION DATE



### DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT: 1. ANY CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT, OR ALL OF THESE, WILL BE DONE PURSUANT TO THIS PLAN AND; 2. THAT RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION WILL HAVE A CERTIFICATE OF TRAINING FROM A MARYLAND DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT; AND 3. I WILL PROVIDE THE DISTRICT ONE COPY OF A RED-LINE AS-BUILT DRAWING OF EACH STORMWATER MANAGEMENT FACILITY.

SIGNATURE Leo A. Meier DATE 4/18/07  
PRINT NAME Leo A. Meier, Pres  
JULEO, LLC  
2601 CECIL DRIVE  
CHESTER, MD  
410-280-3212

### AS-BUILT CERTIFICATION

INFORMATION SHOWN ON THESE PLANS IN RED LETTERING REPRESENTS THE ACTUAL LOCATION OF CONSTRUCTED FEATURES AS BUILT ON SITE AND FIELD LOCATED BY MC CRONE, INC. ON THE \_\_\_ DAY OF \_\_\_, 20\_\_.

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "ASBUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
PRINT NAME \_\_\_\_\_ P.E. No. \_\_\_\_\_

### POND CONSTRUCTION CERTIFICATE

I HEREBY CERTIFY AN "AS-BUILT" SURVEY OF THE STORMWATER MANAGEMENT FACILITY WILL BE PERFORMED AND IN THE EVENT THAT THE AS-BUILT FACILITY DOES NOT SUBSTANTIALLY REFLECT THE STORMWATER FACILITY DESIGN, I SHALL HAVE THE CONTRACTOR MAKE THE NECESSARY CHANGES OR MODIFICATIONS TO BRING THE STORMWATER FACILITY INTO COMPLIANCE WITH THE DESIGN, AS DIRECTED BY THE ENGINEER OF QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS.

SIGNATURE Leo A. Meier DATE 4/18/07  
PRINT NAME Leo A. Meier, Pres  
JULEO, LLC  
2601 CECIL DRIVE  
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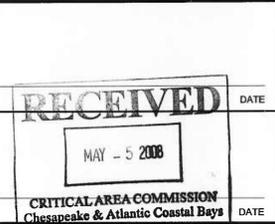
### DEPARTMENT OF LAND USE, GROWTH MANAGEMENT AND ENVIRONMENT CERTIFICATE

THIS IS TO CERTIFY THAT THIS MINOR SITE PLAN WAS APPROVED BY THE DEPARTMENT OF LAND USE, GROWTH MANAGEMENT AND ENVIRONMENT OF QUEEN ANNE'S COUNTY ON THE \_\_\_ DAY OF \_\_\_, 20\_\_.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
MISP \_\_\_\_\_  
SURVEYOR/ENGINEER: \_\_\_\_\_ OWNER/DEVELOPER: \_\_\_\_\_  
MC CRONE, INC.  
207 N. LIBERTY STREET  
CENTREVILLE, MARYLAND 21617  
410-758-2237  
JULEO, LLC  
2601 CECIL DRIVE  
CHESTER, MARYLAND 21619  
410-280-3212

### INDEX OF DRAWINGS

SHEET #	DESCRIPTION
1	TITLE SHEET
2	EXISTING CONDITIONS PLAN
3-4	OVERALL SITE PLAN
5-6	GRADING AND SEDIMENT & EROSION CONTROL PLAN
7	STORMWATER MANAGEMENT PLAN & DETAILS
8-9	UTILITY PLAN
10-11	LANDSCAPE PLAN
12-13	DETAILS
14	ROAD IMPROVEMENT PLAN



APPROVED BY: \_\_\_\_\_  
DATE \_\_\_\_\_  
QA Co. DEPT. OF PUBLIC WORKS

APPROVED BY: \_\_\_\_\_  
DATE \_\_\_\_\_  
QA Co. SOIL CONSERVATION SERVICE

REVISIONS		
REV. #	DATE	DESCRIPTION
1	1/18/08	PER COUNTY COMMENTS OF 12/11/07
2	4/8/08	PER COUNTY COMMENTS OF 2/13/08
3	5/1/08	PER COUNTY COMMENTS OF 4/22/08

DATE: NOVEMBER, 2007  
JOB NUMBER: D1050429  
SCALE: N.T.S.  
DRAWN BY: L.T.  
DESIGNED BY: B.R.R.  
APPROVED BY: \_\_\_\_\_  
FOLDER REFERENCE: \_\_\_\_\_



**MC CRONE**  
• Engineering • Environmental Sciences  
• Construction Services • Land Planning & Surveying  
ANNAPOLIS • CENTREVILLE • DOVER • ELKTON • SALISBURY  
207 NORTH LIBERTY STREET  
CENTREVILLE, MARYLAND 21617  
(410) 758-2237 • FAX (410) 758-2464  
Copyright 2008

COVER SHEET  
FOR:  
**JULEO, LLC**  
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
TAX MAP - 56, GRID - 6, PARCEL - 250, PARCEL 1  
PREPARED FOR: JULEO, LLC

5/1/08  
**1 OF 14**  
FILE NO.: D1050429-01-02\_COVER.dwg

C:\D\1050429-01-02\_COVER.dwg Tab:01-Cover Sheet PLOTTED: Apr 30, 2008 - 3:49pm

# SITE PLAN AND CONSTRUCTION DRAWINGS

ON THE LANDS OF

# JULEO, LLC

## FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND PREPARED FOR: JULEO, LLC.



NOT FOR CONSTRUCTION  
PENDING AGENCY APPROVAL

### LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	---	---
SETBACK LINE	---	---
PROPERTY CORNER (TYPE NOT SPECIFIED)	○	○
BENCH MARK	▲ ELEV: 100.00	
MAJOR CONTOUR	---25---	---25---
MINOR CONTOUR	---24---	---24---
ROAD CENTERLINE	---	---
EDGE OF PAVEMENT	---	---
PAVEMENT HATCH	[Hatch]	[Hatch]
EDGE OF GRAVEL	---	---
GRAVEL HATCH	[Hatch]	[Hatch]
BUILDING OUTLINE	---	---
BUILDING SOLID FILL	[Hatch]	[Hatch]
SIDEWALK	---	---
SIDEWALK HATCH	[Hatch]	[Hatch]
CONCRETE	---	---
SIGN	---	---
SOIL BORING	○	○
WETLAND HATCH	[Hatch]	[Hatch]
WETLAND BUFFER	---	---
FLOOD PLAIN	---	---
STORM PIPE	---	---
RIP RAP	[Hatch]	[Hatch]
SANITARY MANHOLE	⊙	⊙
SANITARY CLEANOUT	○ CO	○ CO
SANITARY PIPE	SS	SS
WATER PIPE	W	W
FIRE HYDRANT	⊕	⊕
WELL	⊙	⊙
OVERHEAD ELECTRIC	E	E
UTILITY POLE	⊕	⊕
ELEC. JCT./SERVICE BOX	□ ELEC	□ ELEC
GUY WIRE	---	---
LIGHT POLE	⊕	⊕
TELEPHONE PEDESTAL	⊕	⊕
DECIDUOUS TREE	⊕	⊕
CONIFEROUS TREE	⊕	⊕
TREE/SHRUBBRUSH LINE	---	---
FOREST RETENTION BOUNDARY	---	---
TREE PROTECTION FENCE	---	---

### GENERAL NOTES

- THE EXISTING UTILITIES SHOWN WERE TAKEN FROM THE BEST AVAILABLE RECORDS. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE INCURRED TO SUCH UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION AND SHALL COORDINATE CONSTRUCTION WITH THE UTILITY COMPANIES INVOLVED:
 

DELMARVA POWER	1-410-758-0830
MISS UTILITY	1-800-441-8355
McCRONE, INC.	1-410-758-2237
MARYLAND DEPARTMENT OF ENVIRONMENT	1-410-901-4023
QUEEN ANNE'S COUNTY DEPT. OF PUBLIC WORKS	1-410-758-0525
QUEEN ANNE'S COUNTY SANITARY DISTRICT	1-410-643-3535
VERIZON	1-410-778-8010
- THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, LABOR, AND MATERIALS FOR ANY MISCELLANEOUS OR TEST PIT EXCAVATIONS REQUIRED BY THE ENGINEER. THE CONTRACTOR SHALL TEST PIT TO CONFIRM THE ACTUAL LOCATION OF ANY AND ALL EXISTING SANITARY DISTRICT FACILITIES AT EACH AND EVERY CROSSING AND THE IN.
- ALL CONSTRUCTION SHALL BE MARKED FOR TRAFFIC AND PEDESTRIAN SAFETY. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH SECTION VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS AND QUEEN ANNE'S COUNTY SANITARY DISTRICT.
- THE CONTRACTOR ASSUMES ALL RESPONSIBILITIES FOR ANY DEVIATIONS FROM THESE PLANS, UNLESS SAID DEVIATION IS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL RECEIVE WRITTEN PERMISSION FROM THE ENGINEER IF A DEVIATION OF THE PLAN IS NECESSARY.
- ALL DISTURBED AREAS SHALL BE SMOOTHLY GRADED TO PROVIDE POSITIVE DRAINAGE IN THE DIRECTION OF FLOW ARROWS HEREIN AND STABILIZED WITH TOPSOIL, SEED, AND MULCH. IF SETTLEMENT OCCURS, TOPSOIL, SEEDING AND MULCHING SHALL BE REPEATED UNTIL SETTLEMENT SUBSIDES (SEE EROSION AND SEDIMENT CONTROL SPECIFICATIONS).
- ALL TRASH, TREES, DEMOLITION DEBRIS, AND UNDERBRUSH ARE TO BE CLEARED AND REMOVED OFF SITE TO AN APPROVED DUMP SITE BY THE CONTRACTOR.
- ANY EXCESS EXCAVATED MATERIAL PLACED OUTSIDE OF THOSE AREAS DESIGNATED ON THIS PLAN SHALL MEET APPROVAL OF QUEEN ANNE'S COUNTY SOIL CONSERVATION AND ENGINEER.
- ANY EXISTING SURVEY MONUMENTATION THAT IS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A REGISTERED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- ALL FILL AREAS WITHIN LIMITS OF BUILDING AND ROADWAY CONSTRUCTION, AND OTHER AREAS AS DESIGNATED ON THESE PLANS, SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY AND LAD AND COMPACTED IN "MAXIMUM LIFTS."
- ALL STORM DRAIN AND SANITARY PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- TRENCHES SHALL NOT REMAIN OPEN OVERNIGHT, IF IT IS NECESSARY FOR TRENCHES TO REMAIN OPEN, STEEL PLATES, CAPABLE OF BEARING TRAFFIC, SHALL BE USED TO COMPLETELY COVER THE TRENCH.
- A MINIMUM OF ONE-WAY TRAFFIC SHALL BE MAINTAINED DURING HOURS OF CONSTRUCTION, AND TWO WAY TRAFFIC AT ALL OTHER TIMES.
- SEE ADDITIONAL SPECIFICATIONS PREPARED JANUARY, 1998, EDITION OF "SPECIFICATIONS FOR CONSTRUCTION OF SEWER COLLECTION, SEWER TRANSMISSION AND WATER DISTRIBUTION LINES", ON FILE WITH THE QUEEN ANNE'S COUNTY SANITARY DISTRICT. IN ADDITION, ALL HARDWARE (I.E. NUTS, BOLTS, WASHERS, RESTRAINING RODS, ETC.) SHALL BE 304 STAINLESS STEEL. CONTRACTOR IS TO REPLACE ANY PLAIN OR GALVANIZED STEEL HARDWARE SUPPLIED BY THE MANUFACTURER, INCLUDING BONNET BOLTS ON DIVISION VALVE, WITH STAINLESS STEEL.
- ALL VALVE BOXES AND VACUUM PITS SHALL BE SET AND ADJUSTED TO GRADE.
- ALL PVC, PE AND HDPE PIPE, OTHER THAN PIPE RUNS BETWEEN GRAVITY SEWER MANHOLES, SHALL HAVE A CONTINUOUS SINGLE STRAND, 8-GAUGE UNCOATED COPPER TRACER WIRE LOCATED BENEATH THE PIPE. THE WIRE SHALL BE STUBBED INTO ALL METER PITS, VACUUM VALVE PITS, CLEANOUTS, AND DIVISION VALVE BOXES.
- INFORMATION PROVIDED IN THESE DRAWINGS IS BASED ON BEST AVAILABLE AS-BUILT INFORMATION. NO GUARANTEE TO THE ACCURACY OF THE LOCATION (HORIZONTAL OR VERTICAL) IS MADE BY THE ENGINEER. CONTRACTOR TO FIELD VERIFY AND TEST PIT AS NEEDED TO VERIFY THE LOCATION OF THE EXISTING UTILITIES. THIS SHALL BE DONE AS PART OF THE CONTRACT FOR THE WORK SHOWN IN THESE DRAWINGS.
- CONTRACTOR IS TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH QUEEN ANNE'S COUNTY ENGINEERS AND OTHER INVOLVED PARTIES AT LEAST TWO (2) WEEKS BEFORE CONSTRUCTION.
- REFER TO TIDAL WETLANDS PERMIT # 200661791/06-NT-2020.

### PARKING CALCULATIONS

18-1-83 C.(1)(a) GENERAL BUSINESS (RETAIL): 1,600 S.F. OF BOAT-RELATED RETAIL x 1 SPACE/350 S.F.	= 4.5 spaces
18-1-83 K.(4) VEHICLE SALES & SERVICES: 6,171 S.F. OF BOAT SALES x 1 SPACE/1,500 S.F.	= 4.1 spaces
TOTAL REQUIRED PARKING SPACES	= 8.6 SPACES
TOTAL PROPOSED PARKING SPACES	= 21 SPACES
TOTAL REQUIRED LOADING SPACES	= 1 SPACE
TOTAL PROPOSED LOADING SPACES	= 2 SPACES (GRAVEL BOAT DISPLAY)

### SITE NOTES:

- FOR DEED REFERENCE TO PARCEL, SEE SM 1510/106.
- THE PARCEL IS ZONED UC - URBAN COMMERCIAL.
- PORTIONS OF THIS SITE ARE LOCATED WITHIN THE 100-YEAR FLOODPLAIN ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S F.I.R.M. MAP NUMBER 240054 0038C, REVISED JUNE 16, 1992.
- PORTIONS OF THE SITE ARE LOCATED WITHIN THE CRITICAL AREA, CLASSIFICATION IDA.
- SOILS OF THE SITE CONSIST OF PINEYNECK - PB (HYDROLOGIC SOIL GROUP B), HURLCOK SANDY LOAM - H (HSG B/D), LONGMARSH & ZEKIAH - LZ (HSG D), UNICORN-SASSAFRAS LOAMS - U68 (HSG B), AND OTHELLO SILT LOAM - OL (HSG CD) PER THE SOIL SURVEY OF QUEEN ANNE'S COUNTY DATED 2002.
- THE SITE IS INTENDED TO BE SERVED BY PUBLIC SEWER AND PRIVATE WATER (WELL).
- PROPERTY LINES FOR PARCEL ARE TAKEN FROM A BOUNDARY SURVEY BY McCRONE, INC. DATED JANUARY 9, 2007.
- HORIZONTAL DATUM IS BASED ON NAD 83/91, AND THE VERTICAL DATUM IS BASED ON NAVD 1988.
- NONTIDAL WETLANDS WERE DELINEATED BY ENVIRONMENTAL REGULATIONS CONSULTANT, INC. ON APRIL 14, 1999. A JURISDICTIONAL DETERMINATION WAS ISSUED BY THE U.S. ARMY CORPS OF ENGINEERS IN MAY 1999 AND REISSUED ON MAY 11, 2004.
- NO DISTURBANCE IS PROPOSED IN THE UPLAND PORTION OF THE SITE, THEREFORE THE PROJECT IS EXEMPT FROM THE REQUIREMENT OF A FOREST CONSERVATION PLAN. SEE SECTION 18-2.4.(1) OF THE QUEEN ANNE'S COUNTY CODE.
- ACCORDING TO §18-1-22.B OF THE COUNTY CODE, LOW, MEDIUM, AND HIGH COMMERCIAL IS PERMITTED IN THE URBAN COMMERCIAL ZONING DISTRICT. THE DEFINITIONS CONTAINED IN APPENDIX A OF CHAPTER 18 OF THE COUNTY CODE INCLUDE RETAIL AND BOAT SALES AS HIGH AND MEDIUM COMMERCIAL USES. THEREFORE, THE PROPOSED USE OF NEW BOAT SALES AND SERVICE WITH EXTERIOR STORAGE/DISPLAY, IS PERMITTED ON THE SITE.
- THIS SITE IS SERVED BY THE KENT NARROWS, STEVENSVILLE, GRASONVILLE AREA WASTEWATER COLLECTION SYSTEM "A".
- MAXIMUM BUILDING HEIGHT IS 45 FEET AND PROPOSED BUILDING HEIGHT IS 30 FEET.
- MAXIMUM FREESTANDING SIGN SURFACE AREA ALLOWED FOR THIS SITE IS 250 SQUARE FEET. ONE MAIN FREESTANDING SIGN IS PROPOSED TO ADVERTISE THE SITE. ITS DIMENSIONS ARE 9-FT HIGH BY 15-FT WIDE FOR A TOTAL AREA OF 135 SQUARE FEET.
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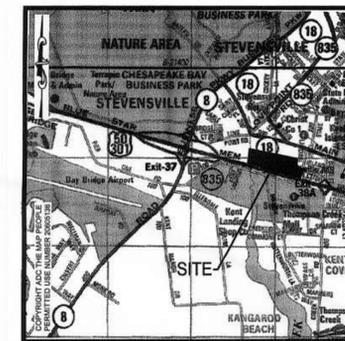
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### PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

Signature: *Steve Landon*  
PRINTED NAME: STEVE LANDON  
LICENSE NO. 31184 EXPIRATION DATE 1/1/07



VICINITY MAP  
SCALE 1" = 2000'

### DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT: 1. ANY CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT, OR ALL OF THESE, WILL BE DONE PURSUANT TO THIS PLAN AND; 2. THAT RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION WILL HAVE A CERTIFICATE OF TRAINING FROM A MARYLAND DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT; AND 3. I WILL PROVIDE THE DISTRICT ONE COPY OF A RED-LINE AS-BUILT DRAWING OF EACH STORMWATER MANAGEMENT FACILITY.

Signature: *Leo A. Meier* DATE 4/18/07  
PRINT NAME: Leo A. Meier, Pres  
JULEO, LLC  
2601 CECIL DRIVE  
CHESTER, MD  
410-280-3212

### POND CONSTRUCTION CERTIFICATE

I HEREBY CERTIFY AN "AS-BUILT" SURVEY OF THE STORMWATER MANAGEMENT FACILITY WILL BE PERFORMED AND IN THE EVENT THAT THE AS-BUILT FACILITY DOES NOT SUBSTANTIALLY REFLECT THE STORMWATER FACILITY DESIGN, I SHALL HAVE THE CONTRACTOR MAKE THE NECESSARY CHANGES OR MODIFICATIONS TO BRING THE STORMWATER FACILITY INTO COMPLIANCE WITH THE DESIGN, AS DIRECTED BY THE ENGINEER OF QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS.

Signature: *Leo A. Meier* DATE 4/18/07  
PRINT NAME: Leo A. Meier, Pres  
JULEO, LLC  
2601 CECIL DRIVE  
CHESTER, MD  
410-280-3212

### AS-BUILT CERTIFICATION

INFORMATION SHOWN ON THESE PLANS IN RED LETTERING REPRESENTS THE ACTUAL LOCATION OF CONSTRUCTED FEATURES AS BUILT ON SITE AND FIELD LOCATED BY McCRONE, INC. ON THE \_\_\_ DAY OF \_\_\_, 20\_\_.

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "ASBUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.  
SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
PRINT NAME \_\_\_\_\_ P.E. No. \_\_\_\_\_

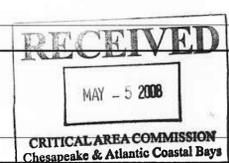
### DEPARTMENT OF LAND USE, GROWTH MANAGEMENT AND ENVIRONMENT CERTIFICATE

THIS IS TO CERTIFY THAT THIS MINOR SITE PLAN WAS APPROVED BY THE DEPARTMENT OF LAND USE, GROWTH MANAGEMENT AND ENVIRONMENT OF QUEEN ANNE'S COUNTY ON THE \_\_\_ DAY OF \_\_\_, 20\_\_.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
MISP \_\_\_\_\_  
SURVEYOR/ENGINEER: \_\_\_\_\_ OWNER/DEVELOPER: \_\_\_\_\_  
McCRONE, INC.  
207 N. LIBERTY STREET  
CENTREVILLE, MARYLAND 21617  
410-758-2237  
JULEO, LLC  
2601 CECIL DRIVE  
CHESTER, MARYLAND 21619  
410-280-3212

### INDEX OF DRAWINGS

SHEET #	DESCRIPTION
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7	STORMWATER MANAGEMENT PLAN & DETAILS
8-9	UTILITY PLAN
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12-13	DETAILS
14	ROAD IMPROVEMENT PLAN



APPROVED BY:	DATE	QA Co. DEPT. OF PUBLIC WORKS	DATE
APPROVED BY:	DATE	QA Co. SOIL CONSERVATION SERVICE	DATE

REVISIONS		
REV. #	DATE	DESCRIPTION
1	1/18/08	PER COUNTY COMMENTS OF 12/11/07
2	4/8/08	PER COUNTY COMMENTS OF 2/13/08
3	5/1/08	PER COUNTY COMMENTS OF 4/22/08

DATE: NOVEMBER, 2007  
JOB NUMBER: D1050429  
SCALE: N.T.S.  
DRAWN BY: L.T.  
DESIGNED BY: B.R.B.  
APPROVED BY: S.E.L.  
FOLDER REFERENCE: 324  
SEAL: *[Signature]*  
DATE: 4/30/08

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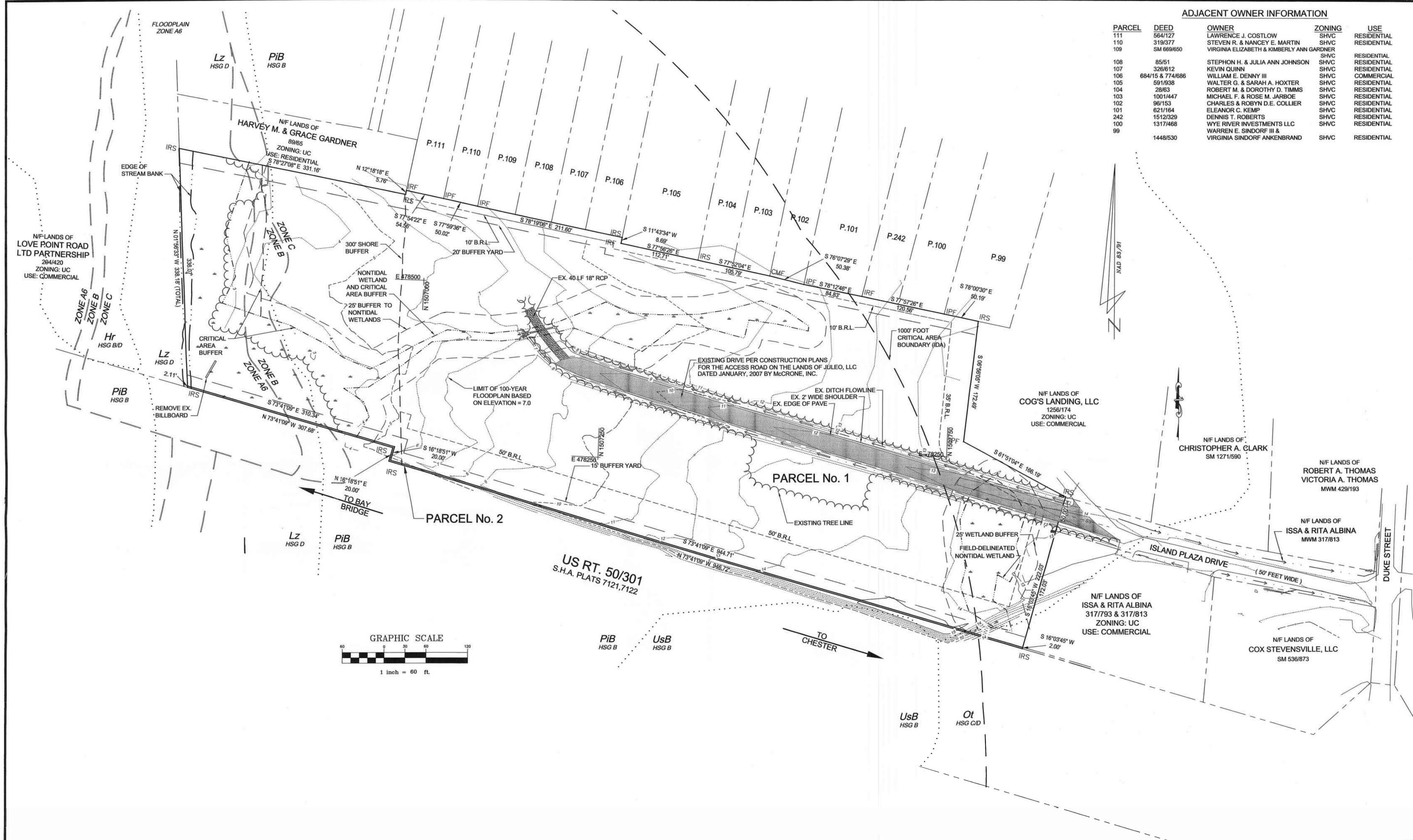
COVER SHEET  
FOR:  
**JULEO, LLC**  
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
TAX MAP - 56, GRID - 6, PARCEL - 250, PARCEL 1  
PREPARED FOR: JULEO, LLC

SHEET NO.:  
**1 OF 14**  
FILE NO.:  
D1050429-01-02\_COVER.dwg

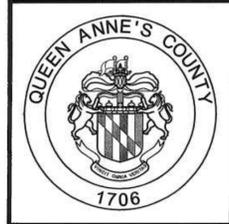
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Tab:01-Cover Sheet

ADJACENT OWNER INFORMATION

PARCEL	DEED	OWNER	ZONING	USE
111	564/127	LAWRENCE J. COSTLOW	SHVC	RESIDENTIAL
110	319/377	STEVEN R. & NANCEY E. MARTIN	SHVC	RESIDENTIAL
109	SM 669/650	VIRGINIA ELIZABETH & KIMBERLY ANN GARDNER	SHVC	RESIDENTIAL
108	85/51	STEPHON H. & JULIA ANN JOHNSON	SHVC	RESIDENTIAL
107	326/612	KEVIN QUINN	SHVC	RESIDENTIAL
106	684/15 & 774/686	WILLIAM E. DENNY III	SHVC	COMMERCIAL
105	591/838	WALTER G. & SARAH A. HOXTER	SHVC	RESIDENTIAL
104	28/63	ROBERT M. & DOROTHY D. TIMMS	SHVC	RESIDENTIAL
103	1001/447	MICHAEL F. & ROSE M. JARBOE	SHVC	RESIDENTIAL
102	96/153	CHARLES & ROBYN D.E. COLLIER	SHVC	RESIDENTIAL
101	621/164	ELEANOR C. KEMP	SHVC	RESIDENTIAL
242	1512/329	DENNIS T. ROBERTS	SHVC	RESIDENTIAL
100	1317/468	WYE RIVER INVESTMENTS LLC	SHVC	RESIDENTIAL
99	1448/530	WARREN E. SINDORF III & VIRGINIA SINDORF ANKENBRAND	SHVC	RESIDENTIAL



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APPROVED BY:	DATE	QA Co. DEPT. OF PUBLIC WORKS	DATE
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DATE:	NOVEMBER, 2007
JOB NUMBER:	D1050429
SCALE:	1"=60'
DRAWN BY:	LT
DESIGNED BY:	JSK
APPROVED BY:	S.E.L.
FOLDER REFERENCE:	324

SEAL DATE 4/30/08

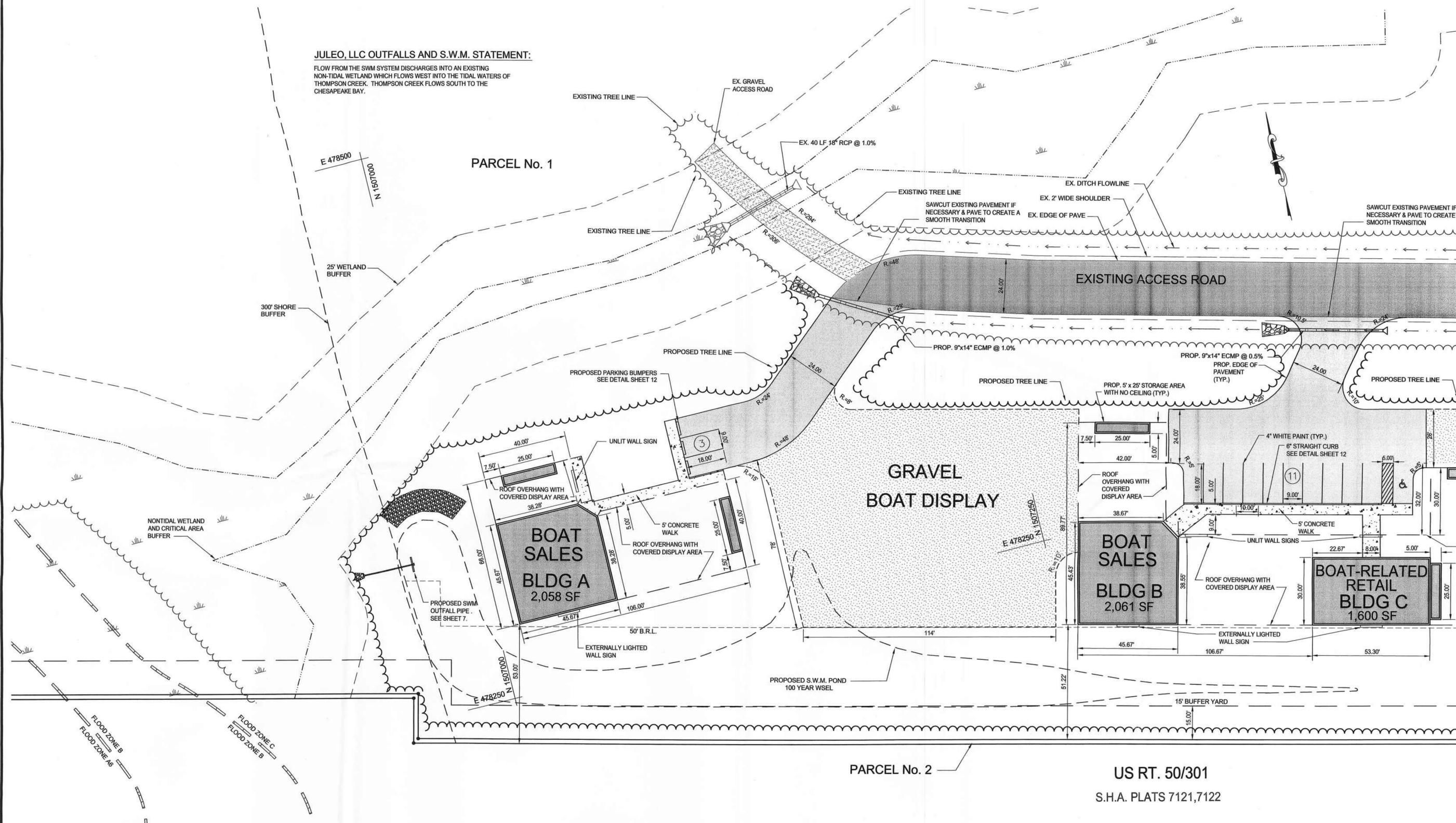
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EXISTING CONDITIONS  
 FOR:  
**JULEO, LLC**  
 FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
 TAX MAP - 56, GRID - 6, PARCEL - 250, PARCEL 1  
 PREPARED FOR: JULEO, LLC

SHEET NO.:  
**2 OF 14**  
 FILE NO.:  
 D1050429-01-02\_COVER.dwg

**JULEO, LLC OUTFALLS AND S.W.M. STATEMENT:**

FLOW FROM THE SWM SYSTEM DISCHARGES INTO AN EXISTING NON-TIDAL WETLAND WHICH FLOWS WEST INTO THE TIDAL WATERS OF THOMPSON CREEK. THOMPSON CREEK FLOWS SOUTH TO THE CHESAPEAKE BAY.



SEE CONTINUATION ON SHEET 4

PLOTTED: Apr 30, 2008 - 4:27pm Q:\1050429-Juleo\dwg\Engineering\1050429\_03-04\_SP.dwg.....Tab:SHEET 3

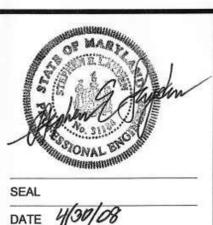


APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 QA Co. DEPT. OF PUBLIC WORKS

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 QA Co. SOIL CONSERVATION SERVICE

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DATE: NOVEMBER, 2007  
 JOB NUMBER: D1050429  
 SCALE: 1"=20'  
 DRAWN BY: J.S.K.  
 DESIGNED BY: J.S.K.  
 APPROVED BY: S.E.L.  
 FOLDER REFERENCE: 324



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SITE PLAN

FOR:  
**JULEO, LLC**

FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

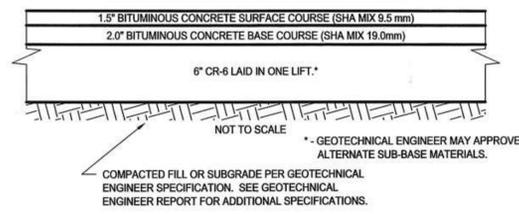
TAX MAP - 56, GRID - 6, PARCEL - 250, PARCEL 1

PREPARED FOR: JULEO, LLC

SHEET NO.: **3 OF 14**

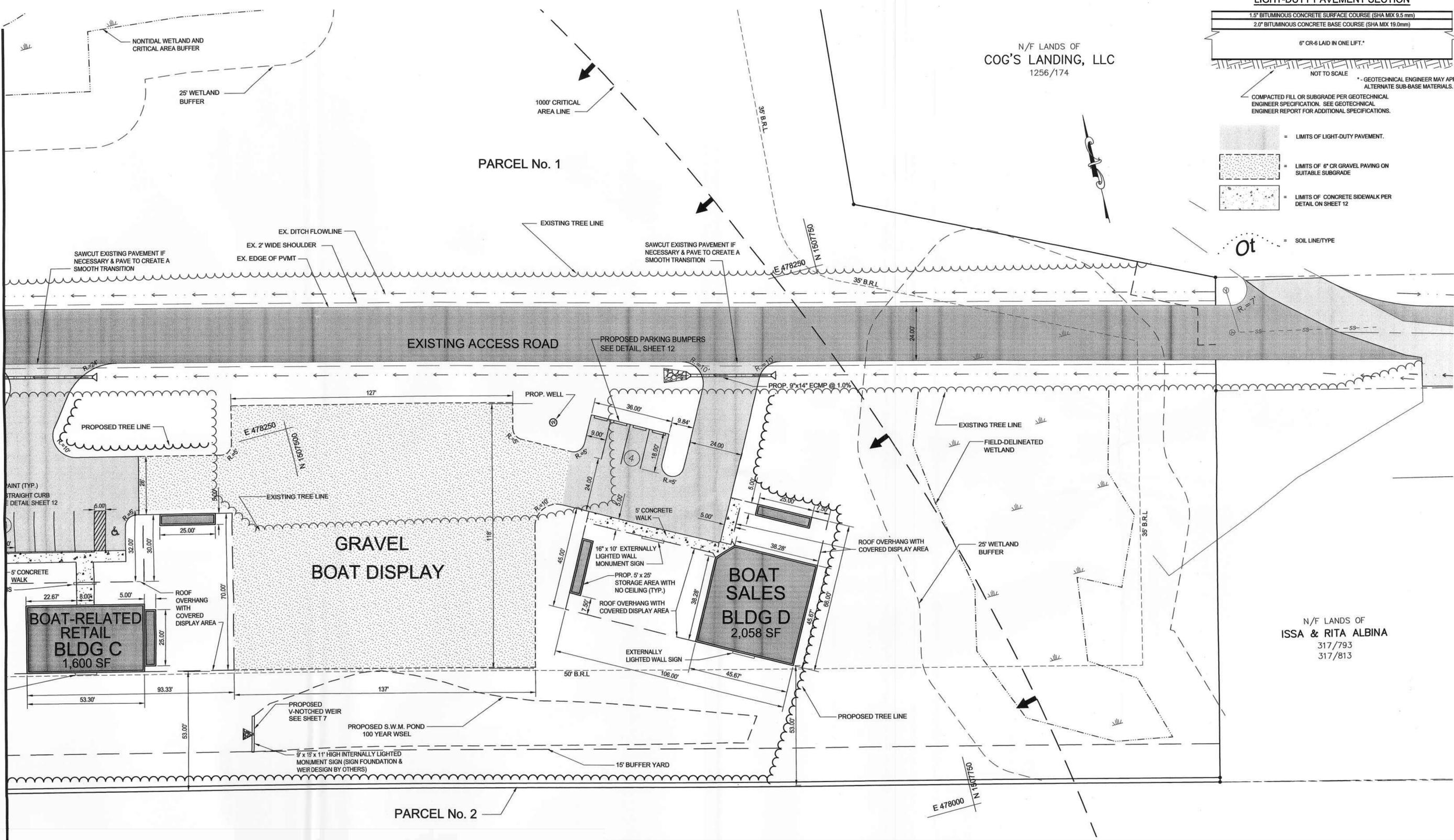
FILE NO.: D1050429\_03-04\_SP.dwg

**LIGHT-DUTY PAVEMENT SECTION**



- = LIMITS OF LIGHT-DUTY PAVEMENT.
- = LIMITS OF 6" CR GRAVEL PAVING ON SUITABLE SUBGRADE
- = LIMITS OF CONCRETE SIDEWALK PER DETAIL ON SHEET 12
- = SOIL LINE/TYPE

SEE CONTINUATION ON SHEET 3



PLOTTED: Apr 30, 2008 - 4:27pm C:\D:\060429-Juleo\dwg\Engineering\1050429\_03-04\_SP.dwg Tab: SHEET 4

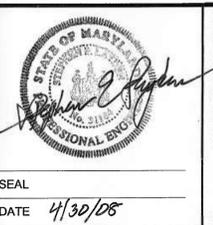


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 DATE: \_\_\_\_\_  
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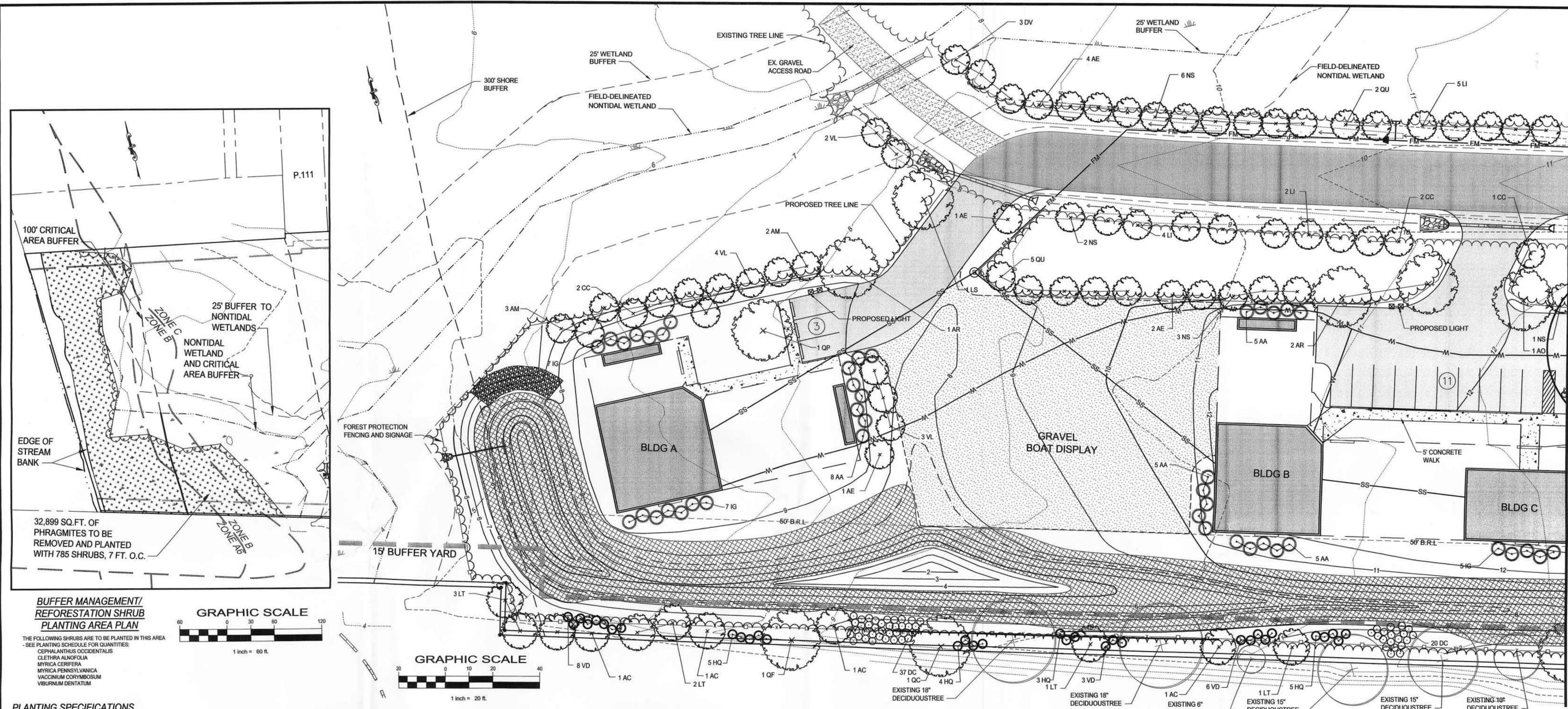
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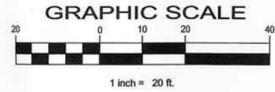
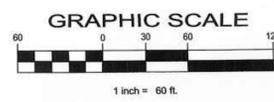
SITE PLAN  
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**JULEO, LLC**  
 FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
 TAX MAP - 56, GRID - 6, PARCEL - 250, PARCEL 1  
 PREPARED FOR: JULEO, LLC

SHEET NO.:  
**4** OF **14**  
 FILE NO.:  
 D1050429\_03-04\_SP.dwg



**BUFFER MANAGEMENT/ REFORESTATION SHRUB PLANTING AREA PLAN**

THE FOLLOWING SHRUBS ARE TO BE PLANTED IN THIS AREA - SEE PLANTING SCHEDULE FOR QUANTITIES:  
 CEPHALANTHUS OCCIDENTALIS  
 CLETHRA ALNIFOLIA  
 MYRICA CERIFERA  
 MYRICA PENNSYLVANICA  
 VACCINIUM CORYMBOSUM  
 VIBURNUM DENTATUM

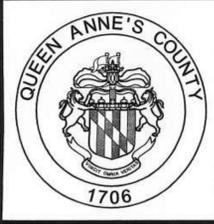
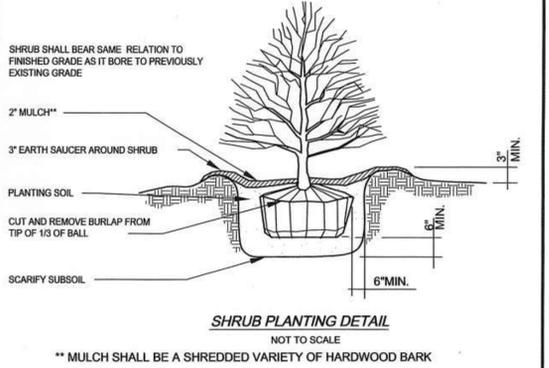
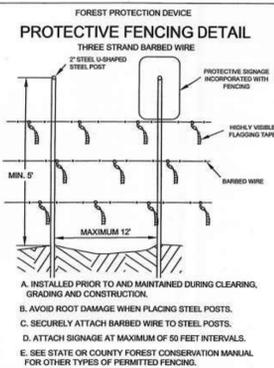
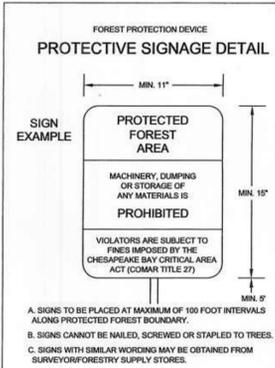


**PLANTING SPECIFICATIONS**

- A. MATERIALS:**
- PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, AND GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. THEY SHALL HAVE BEEN ROOT PRUNED WITHIN THE LAST TWO YEARS. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, PEST, EGGS OR LARVAE, AND SHALL HAVE A HEALTHY, DEVELOPED ROOT SYSTEM. PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH A DAMAGED OR CROOKED LEADER OR MULTIPLE LEADERS, ABRASIONS ON THE BARK, SUNSCALD, DISFIGURING KNOTS OR FRESH CUTS OVER 1/2" WILL BE REJECTED. NO CHANGE IN QUANTITY, SIZE, KIND OR QUALITY OF PLANT SPECIFIED WILL BE PERMITTED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER.
  - TOPSOIL SHALL BE FERTILE, FRIABLE AND TYPICAL OF THE LOCALITY; IT SHALL BE FREE OF STONES, LUMPS, PLANTS, ROOTS, STICKS AND SHALL NOT BE DELIVERED IN A FROZEN OR MUDDY CONDITION.
  - PLANTING SOIL (BACKFILL MIX) SHALL BE FIVE PARTS TOPSOIL AND ONE PART WET LOOSE PEATMOSS.
  - STAKING MATERIALS: GUY WIRE SHALL BE #12 GALVANIZED TWISTED TWO STRAND WIRE. HOSE SHALL BE A SUITABLE LENGTH OF TWO-PLY, REINFORCED BLACK RUBBER HOSE 3/4" INCH IN DIAMETER; STAKES SHALL CONFORM TO THE DETAIL ON THIS SHEET.
  - WRAPPING MATERIAL SHALL BE A STANDARD MANUFACTURED TREE WRAPPING PAPER, BROWN IN COLOR WITH CRINKLED SURFACE AND FASTENED BY AN APPROVED METHOD.
- B. APPLICABLE SPECIFICATIONS AND STANDARDS:**
- "STANDARDIZED PLANT NAMES," LATEST EDITION AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.
  - "AMERICAN STANDARD FOR NURSERY STOCK," LATEST EDITION, AMERICAN ASSOCIATION OF NURSERYMEN.
- C. DIGGING AND HANDLING OF PLANT MATERIALS:**
- IMMEDIATELY BEFORE DIGGING, SPRAY ALL EVERGREEN OR DECIDUOUS PLANT MATERIAL IN FULL LEAF WITH ANTI-DESICCANT, APPLYING AN ADEQUATE FILM OVER TRUNKS, BRANCHES, TWIGS, AND/OR FOLIAGE.
  - DIG BALL AND BURLAP (B&B) PLANTS WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER NOT LESS THAN THAT RECOMMENDED BY AMERICAN STANDARD FOR NURSERY STOCK, AND IF SUFFICIENT DEPTH TO INCLUDE THE FIBROUS AND FEEDING ROOTS. PLANTS MOVED WITH A BALL WILL NOT BE ACCEPTED IF THE BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATIONS.
- D. EXCAVATION OF PLANTING AREAS:**
- STAKE OUT ON THE GROUND LOCATIONS FOR PLANTS AND OUTLINES OF AREA TO BE PLANTED AND OBTAIN APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER BEFORE EXCAVATION IS BEGUN.
  - SET PLANTS AT SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO THE GROUND FROM WHICH THEY WERE GROWN. USE PLANTING SOIL TO BACKFILL APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE INSTALLING REMAINDER OF THE PLANTING SOIL TO TOP OF PIT, ELIMINATING ALL AIR POCKETS.
  - SET PLANTING PLUMBS AND BRACE RIGIDLY IN POSITION UNTIL THE PLANTING SOIL HAS BEEN STAMPED SOLIDLY AROUND THE BALL AND ROOTS. CUT ROPES OR STRINGS FROM TOP OF BALL AFTER PLANT HAS BEEN SET. LEAVE BURLAP OR CLOTH WRAPPINGS INTACT AROUND BALLS. TURN UNDER AND BURY PORTIONS OF BURLAP AT TOP OF BALL.
- E. PLANTING OPERATIONS:**
- SET PLANTS AT SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO THE GROUND FROM WHICH THEY WERE GROWN. USE PLANTING SOIL TO BACKFILL APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE INSTALLING REMAINDER OF THE PLANTING SOIL TO TOP OF PIT, ELIMINATING ALL AIR POCKETS.
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- F. STAKING AND PRUNING:**
- STAKING SHALL BE COMPLETED IMMEDIATELY AFTER PLANTING. PLANTS SHALL STAND PLUMB AFTER STAKING. STAKES AND GUY WIRES SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD AND DEPOSITED OFF SITE BY THE CONTRACTOR.
  - PRUNE PLANTS AT THE TIME OF PLANTING AS DIRECTED BY THE LANDSCAPE ARCHITECT/DESIGNER TO REMOVE 1/3 TO 1/2 OF THE FOLIAGE. REMOVE ALL DEAD WOOD, SUCKERS, OR BROKEN BRANCHES AND PRESERVE THE NATURAL CHARACTER OF THE PLANT.
- G. GUARANTEE:**
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE (1) FULL YEAR FROM THE DATE THAT THE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETE. PLANT MATERIAL NOT FOUND TO BE IN A HEALTHY, VIGOROUS CONDITION AT THE BEGINNING OF THE SECOND GROWING SEASON IS TO BE REPLACED.
- H. SEEDING:**
- ALL AREAS REMAINING DISTURBED AFTER CONSTRUCTION, PAVING AND INSTALLATION OF THE LANDSCAPING ARE TO BE SEEDDED.
  - SEED BED PREPARATION: APPLY 25 LBS. OF 10-10-10 FERTILIZER PER 1000 SQ. FT. HARROW OR DISC INTO SOIL TO A DEPTH OF 3-4 INCHES. APPLY PULVERIZED GROUND LIMESTONE, 50 LBS. PER 1000 SQ. FT.
  - SEEDING: APPLY 4.5 LBS PER 1000 SQ. FT. OF KENTUCKY 31 TALL FESCUE OR A SUITABLE COMPARABLE MIX ON A MOIST SEED BED WITH SUITABLE EQUIPMENT.
  - MULCHING: IMMEDIATELY AFTER SEEDING, UNIFORMLY MULCH ENTIRE AREA WITH UNDERWEATHERED SMALL GRAIN STRAW AT A RATE OF 1 1/2-2 TONS PER ACRE. FOR BEST RESULTS, SEEDING SHOULD BE PERFORMED BETWEEN MARCH 1ST AND APRIL 30TH OR AUG. 15TH TO OCT. 31ST.

**LEGEND**

- WARM SEASON GRASS MIX PLANTING AREA
- PROPOSED PARKING LOT LIGHT LOCATION
- PROPOSED FOREST PROTECTION FENCING AND SIGNAGE
- 15' LANDSCAPE BUFFER YARD



APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 QA Co. DEPT. OF PUBLIC WORKS

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 QA Co. SOIL CONSERVATION SERVICE

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 DRAWN BY: LAS  
 DESIGNED BY: LAS  
 APPROVED BY: S.E.L.  
 FOLDER REFERENCE: 324

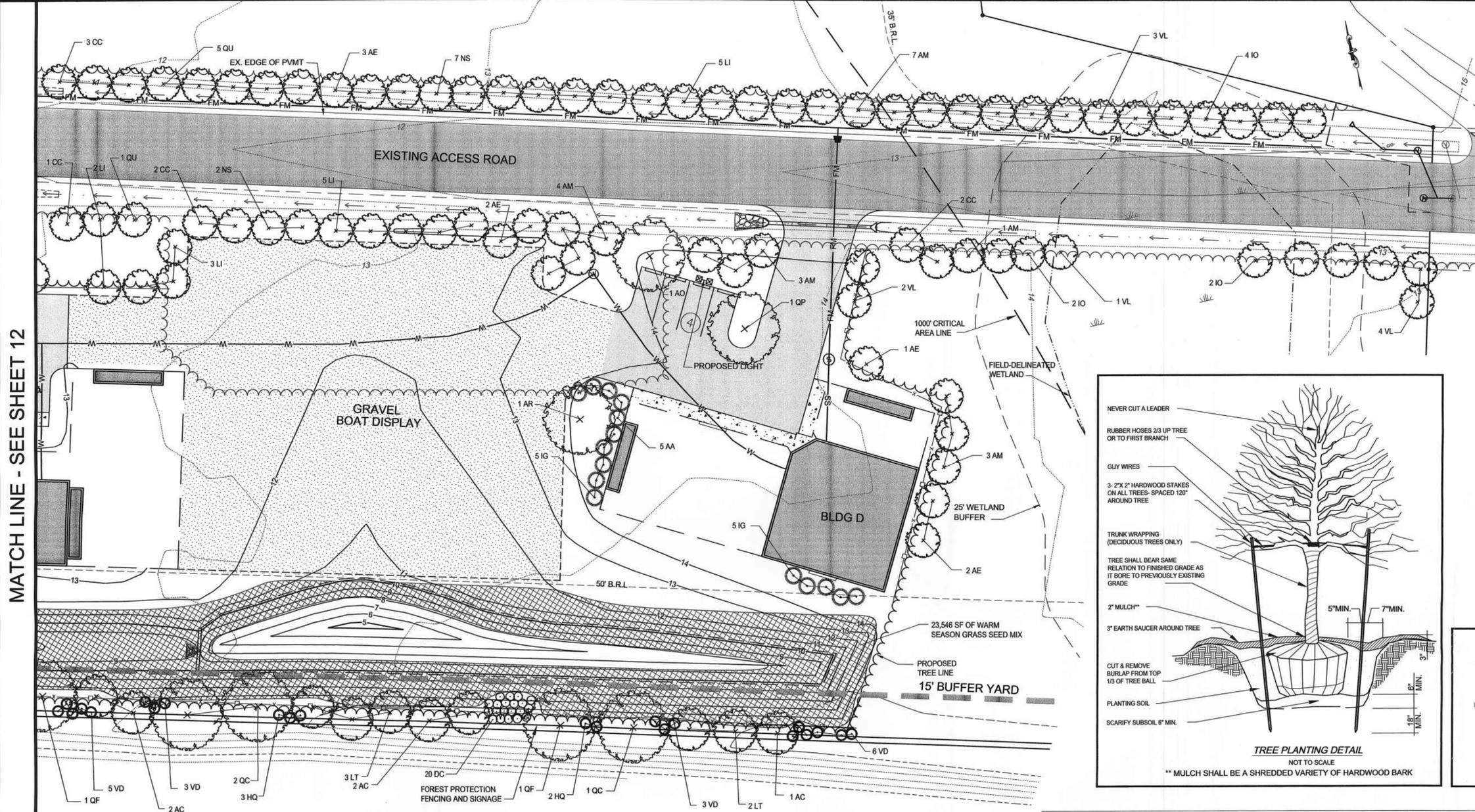
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LANDSCAPE PLAN  
 FOR:  
**JULEO, LLC**  
 FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
 TAX MAP - 56, GRID - 6, PARCEL - 250, PARCEL 1  
 PREPARED FOR: JULEO, LLC

SHEET NO.: **10** OF **14**  
 FILE NO.: D1050429\_10-11\_LNDSCP.dwg

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 Tab:10

MATCH LINE - SEE SHEET 12



**WARM SEASON GRASS SEEDING NOTES**

- MULCH: MULCHING MATERIALS SHALL BE STRAW WHICH SHALL BE BRIGHT IN COLOR, FREE OF ROT AND MILDEW, SMALL-GRAINED, AND FREE OF ALL NOXIOUS WEEDS.
  - SEEDS: THE SUPPLIER OF THE SEEDS SHALL SUPPLY THE GERMINATION TEST RESULTS (WITHIN THE LAST 3 MONTHS) AND THE PURITY OF THE SEEDS UPON DELIVERY TO THE SITE. SPECIFICATIONS SHOW INDICATE SEEDING RATES USING PURE VIBRABLE SEED. ALL SEED MUST BE CLEANED, PROCESSED, ANALYZED FOR PURITY, STORED AND GERMINATED BEFORE BEING USED.
  - FINAL GRADING SHALL BE COMPLETE PRIOR TO THE COMMENCEMENT OF ANY SEEDING AND THE SOIL SHOULD BE TESTED AND APPROPRIATE COMMERCIAL FERTILIZER SHALL BE ADDED PRIOR TO ANY SEEDING.
  - WHEN PROVIDING SEEDING IN AREAS WHERE TREES AND SHRUBS ARE TO BE PLANTED, THE WOODY PLANT SPECIES SHALL OCCUR FIRST. CARE SHOULD BE TAKEN NOT TO DISTURB THE ROOT MASS OF THE TREES OR SHRUBS.
  - OPTIMUM SEEDING TIME: OCTOBER 1 TO MARCH 15. SEEDING CAN BE DONE OUTSIDE THE OPTIMUM WINDOW BUT ESTABLISHMENT MAY TAKE LONGER. PRIOR TO SOWING, EXISTING VEGETATIVE GROWTH SHOULD BE REMOVED OR KILLED WITH HERBICIDES. THE FINISHED GRADE SHALL BE OF FRAGILE NON COMPACTED NATURE TO ENSURE GOOD SOIL TO SEED CONTACT. ANY COMPACTED SOIL IS TO BE LOOSENEE EITHER BY DISING, ROTOTILLING OR RIPPING TO A DEPTH OF 6 INCHES. LIGHTLY COMPACT THE TILLED SOIL WITH A ROLLER, CULTIPACKER, OR SIMILAR IMPLEMENT.
  - SEEDING IS TO BE APPLIED BY HAND OR BROADCASTER AND WORKED INTO THE TOP ONE-INCH OF SOIL BY LIGHT HAND RAKING TO MAXIMIZE SEED/SOIL CONTACT. DO NOT COVER SEED MORE THAN 1/4" DEEP. IF NOT ALREADY INCLUDED IN SEED MIX, PLANT A COVER CROP OF SEED OATS AT 32 LBS. PER ACRE AND ANNUAL RYEGRASS AT 10 LBS. PER ACRE WITH THE SEED. IF USING A NO-TILL SEED DRILL, FOLLOW THE MANUFACTURER'S RECOMMENDATIONS, BEING CAREFUL NOT TO COVER THE SEED MORE THAN 1/4" DEEP.
  - PROVIDE CLEAN STRAW MULCH TO SEEDING SURFACE. SPREAD STRAW EVENLY TO ADEQUATELY COVER ALL SEED AREAS.
- NOTE: FOR INCREASED COVERAGE, INNOCUOUS ANNUAL COVER SPECIES SUCH AS WINTER RYE CAN BE ADDED. UNDER NO CIRCUMSTANCES SHALL A COMMERCIAL OR NONNATIVE GRASSES SUCH AS PERENNIAL RYE, ANNUAL RYE, KENTUCKY BLUEGRASS AND OTHERS BE USED.
- AFTER INSTALLATION, ALL AREAS SHOULD BE WATERED THOROUGHLY AS NECESSARY. AREAS MUST BE KEPT MOIST WITH THE EQUIVALENT OF 1 INCH OF WATER PER WEEK FOR THE FIRST 6 WEEKS UNTIL VEGETATION IS WELL ESTABLISHED, EITHER VIA RAINFALL OR IRRIGATION. WATERING IS TO BE DONE IN A MANNER THAT DOES NOT CREATE EROSION OR DISPLACE STRAW MULCH.

**CRITICAL AREA REFORESTATION PLANTING PLAN**

CHAPTER 18-1-06.A, CHAPTER 14-1-38 D(6)(B) AND CHAPTER 14-1-54

**PLANTING RESPONSIBILITY:** JULEO, LLC  
2601 CECIL DRIVE  
CHESTER, MARYLAND 21619

**REFORESTATION SITE LOCATION:** QUEEN ANNE'S COUNTY, FOURTH DISTRICT  
TAX MAP: 56  
BLOCK: 6  
PARCEL: 250  
ADC MAP: 22, BLOCK: 2J

**REFORESTATION AREA ASSESSMENT:** CONSISTING OF PINEYNECK SILT LOAM SOILS (Pb) IN THE ENTIRETY OF THE PLANTING AREA.

**PRE-PLANTING:** THE EXISTING YARD CAN BE PLANTED DIRECTLY WITHOUT ANY PREPARATION.

**SCHEDULE:** WITHIN ONE YEAR, OR TWO GROWING SEASONS AFTER COMPLETION OF DEVELOPMENT AND/OR APPROVAL OF THE SUBDIVISION.

**MATERIAL:** SEE PLANTING SCHEDULE FOR PLANT MATERIAL SIZES.

**SOURCE:** ENVIRONMENTAL CONCERN, INC., ST. MICHAELS, MARYLAND

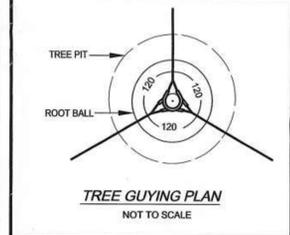
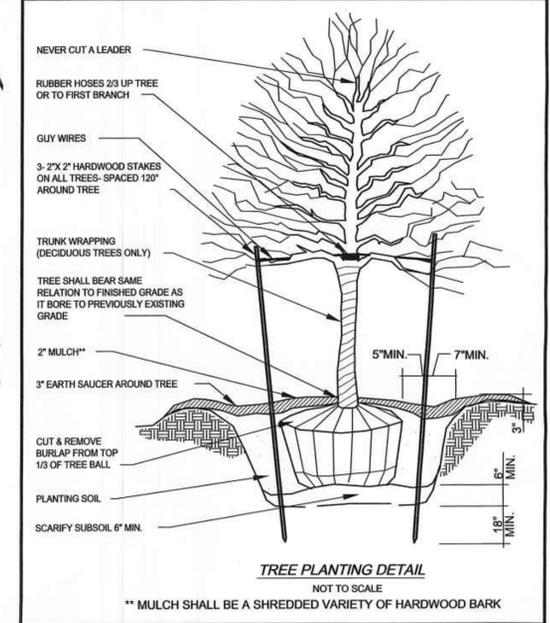
**STOCK:** MIX OF NATIVE SPECIES AS SHOWN ON PLANTING SCHEDULE. ANY RECOMMENDED SPECIES OR PORTION NOT AVAILABLE AT TIME OF NURSERY ORDER WILL BE REPLACED WITH AVAILABLE SPECIES SIMILAR TO THOSE FOUND GROWING IN THE WILD NEARBY.

**METHOD:** PLANTED AT THE SPACING SHOWN WITH A MECHANICAL PLANTER OR MANUALLY.

**POST-PLANTING:**

**POSTING:** "PROTECTED FOREST AREA" SIGNS BOLTED ON STEEL OR WOOD FENCE POSTS ERECTED AT 100 FOOT INTERVALS FACING OUTWARD ALONG THE REFORESTATION AREA BOUNDARIES TO REMAIN IN PERPETUITY.

**INSPECTIONS:** REFORESTATION MUST BE INSPECTED AT 12 AND 24 MONTH INTERVALS AFTER PLANTING, AND A WRITTEN REPORT ADDRESSING STATUS OF THE TREES AND RECOMMENDATIONS FOR CORRECTING ANY NOTABLE EXISTING MORTALITY (DAMAGE, DISEASE, DROUGHT, PESTS, ETC.) FILED WITH THE FOREST CONSERVATION COORDINATOR, QUEEN ANNE'S COUNTY, DEPARTMENT OF PLANNING & ZONING, 180 COURSEVALL DRIVE, CENTREVILLE, MD. 21617



**TWO YEAR PROTECTION AND MAINTENANCE**

THE PURPOSE OF THE TWO YEAR PROTECTION AND MAINTENANCE IS TO INCREASE THE SURVIVABILITY OF THE PLANT MATERIAL BY REDUCING COMPETING VEGETATION, DISEASE, AND MECHANICAL INJURY. ONCE ESTABLISHED, CLEARING OR CUTTING OF THE REFORESTATION AREAS IS NOT PERMITTED AS THE AREAS REMAIN IN LONG TERM PROTECTION. AFTER THE COMPLETION OF ALL REFORESTATION THE OWNER SHALL PERFORM ALL TASKS NECESSARY TO MAINTAIN AND PROTECT THE REFORESTATION AREAS SHOWN HEREON FOR A PERIOD OF TWO (2) YEARS. THE PROTECTION AND MAINTENANCE HEREUNDER SHALL INCLUDE, BUT IS NOT LIMITED TO:

PLANTING SPECIES OR APPROVED CULTIVARS NATIVE TO THE PHYSIOGRAPHIC REGION OF THE COUNTY AND COMPATIBLE WITH THE EXISTING SITE, WATER, FERTILIZING, MULCHING, THINNING, REPLACEMENT OF DAMAGED OR DEAD PLANT MATERIALS, CONTROLLING COMPETING VEGETATION, AND PROTECTING PLANTS FROM DISEASE, PESTS AND MECHANICAL INJURY DURING THE INITIAL PLANTING AND THROUGHOUT THE TWO YEAR MAINTENANCE PERIOD AS NECESSARY. PROVIDING PROTECTIVE DEVICES SUCH AS FENCING, RETAINER WALLS AND INTERPRETIVE SIGNS AS NECESSARY TO PREVENT THE DESTRUCTION OR DEGRADATION OF THE PLANTING SITE.

**LANDSCAPE CALCULATIONS**

CURRENT ZONING - UC - URBAN COMMERCIAL  
FOR DEED REFERENCE, SEE S.M. 1543340  
SITE IS PARTIALLY LOCATED IN THE 100 YEAR FLOOD PLAIN  
PROPOSED USE - BOAT RETAIL/STORAGE SPACE  
TAX MAP 56, GRID 6, PARCEL 250

GROSS SITE AREA = 474,346 SF (10.889 ACs)  
BASE SITE AREA = 474,346SF (10.889 ACs)  
EXISTING LANDSCAPE AREA = 452,905SF (10.397 ACs)  
REQUIRED LANDSCAPE AREA = 94,869 SF (2.178 ACs)  
PROPOSED LANDSCAPE AREA = 362,792 SF (8.329 ACs)

**PARKING LOT LANDSCAPE CALCULATIONS (18-1-72)**

PROPOSED PARKING SPACES = 18  
PLANT UNITS PER 24 SPACES = 2  
18/24 = 0.750 X 2.00 = 1.50 PLANT UNITS  
ALTERNATIVE PROPOSED = ALTERNATIVE #5  
3" CAL. CANOPY TREES REQUIRED = 1.50 X 3 = 4.50 OR (5) 3" CAL. CANOPY TREES  
2.5" CAL. CANOPY TREES REQUIRED = 1.50 X 2 = 3.00 OR (3) 2.5" CAL. CANOPY TREES  
18" HIGH SHRUBS REQUIRED = 1.50 X 5 = 7.50 OR (8) 18" HIGH SHRUBS

**REQUIRED ON LOT LANDSCAPING (18-1-71)**

MINIMUM REQUIRED LANDSCAPE AREA = 94,869 SF (2.178 ACs)  
LESS AREA IN LANDSCAPE BUFFERS = 42,746 SF (0.981 ACs)  
LESS AREA IN PARKING LOT LANDSCAPE = 1,203 SF (0.028 ACs)  
EQUALS AREA OF SITE TO BE LANDSCAPED = 50,920 SF (1.169 ACs)  
PLANT UNITS REQUIRED = 1.169 X 4 = 4.68  
ALTERNATIVE PROPOSED = ALTERNATIVE #1  
2.5" CAL. CANOPY TREES REQUIRED = 4.68 X 1 = 4.68 OR (5) 2.5" CAL. CANOPY TREES  
1.5" CAL. UNDERSTORY TREES REQUIRED = 4.68 X 2 = 9.36 OR (9) 1.5" CAL. UNDERSTORY TREES  
18" HIGH SHRUBS REQUIRED = 4.68 X 5 = 23.40 OR (24) 18" HIGH SHRUBS

NO ADDITIONAL TREES ARE PROPOSED FOR ON SITE LANDSCAPING. CREDIT IS REQUESTED FOR THE EXISTING TREES THAT ARE TO REMAIN ON SITE. THE REQUIRED SHRUBS HAVE BEEN PROVIDED.

**LANDSCAPE CALCULATIONS (CONTINUED)**

REQUIRED ROUTE 50/01 BUFFER "B" (15' WIDE)

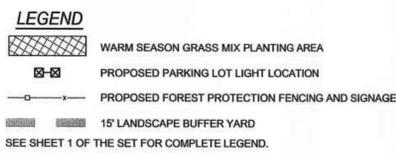
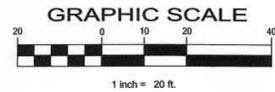
PROPOSED BUFFER LENGTH = 740 LINEAR FEET  
PLANT UNITS PER 150 LINEAR FEET = 2  
740/150 = 4.93 X 2 = 9.86  
PLANT UNITS REQUIRED = 9.86  
PLANT UNIT ALTERNATIVE PROPOSED = ALTERNATIVE #1  
2.5" CAL. CANOPY TREES REQUIRED = 9.86 X 1 = 9.86 OR (10) 2.5" CAL. CANOPY TREES  
1.5" CAL. UNDERSTORY TREES REQUIRED = 9.86 X 2 = 19.72 OR (20) 1.5" CAL. UNDERSTORY TREES  
18" HIGH SHRUBS REQUIRED = 9.86 X 5 = 49.30 OR (50) 18" HIGH SHRUBS

\* THERE ARE 4 EXISTING TREES TO REMAIN IN THE BUFFER THAT ARE 1" AND GREATER DBH. THE PROPOSED BUFFER DOES NOT INCLUDE BUFFER THAT IS FORESTED AND WILL CONTINUE TO REMAIN FORESTED.

REQUIRED UC TO SHVC BUFFER "D" (20' WIDE)

PROPOSED BUFFER LENGTH = 1,180 LINEAR FEET  
PLANT UNITS PER 150 LINEAR FEET = 4  
1,180/150 = 7.867 X 4 = 31.47  
PLANT UNITS REQUIRED = 31.47  
PLANT UNIT ALTERNATIVE PROPOSED = ALTERNATIVE #1  
2.5" CAL. CANOPY TREES REQUIRED = 31.47 X 1 = 31.47 OR (31) 2.5" CAL. CANOPY TREE  
1.5" CAL. UNDERSTORY TREES REQUIRED = 31.47 X 2 = 62.94 OR (63) 1.5" CAL. UNDERSTORY TREES  
18" HIGH SHRUBS REQUIRED = 31.47 X 5 = 157.35 OR (158) 18" HIGH SHRUBS

NO PLANTING IS PROPOSED ALONG THE SHVD ZONING LINE AT THIS TIME AS THE NEAREST DISTURBANCE OF THE EXISTING FOREST TO THE PROPERTY LINE IS 110'. THE EXISTING 20' BUFFER HAS AN ESTIMATED 120 TREES BASED ON THE AVERAGE DENSITY OF TREES ON SITE.



**CRITICAL AREA TREE CALCULATIONS - IDA**

GROSS SITE AREA = 474,346 SF (10.889 ACs)  
LESS UPLAND AREA = 52,311 SF (1.200 ACs)  
EQUALS BASE SITE AREA IN CRITICAL AREA = 422,035 SF (9.689 ACs)

ESTIMATED TREES WITHIN CRITICAL AREA = 1,843 TREES  
REQUIRED TREE CLEARING WITHIN CRITICAL AREA = 437 TREES (24%)  
REQUIRED TREE MITIGATION WITHIN CRITICAL AREA = 437 TREES  
TOTAL PROPOSED ON SITE TREE MITIGATION = 297 TREES  
(140 TREES AND 785 SHRUBS/5)

PROPOSED MITIGATION TO BE PROVIDED AS FEE IN LIEU = 140 TREES

**UPLAND WOODLAND CALCULATIONS**

GROSS SITE AREA = 474,346 SF (10.889 ACs)  
UPLAND AREA = 52,311 SF (1.200 ACs)

AREA OF WOODLAND IN UPLAND ALLOWED CLEARING IN UPLAND PROPOSED CLEARING IN UPLAND = 42,283 SF (0.971 ACs)  
= 16,913 SF (0.388 ACs) (40%)  
= 0 SF (0.000 ACs) (0%)

**LIGHTING SCHEDULE**

QUANTITY	SYMBOL	CATALOG NUMBER	DESCRIPTION	LAMP	HEIGHT
6	☒	LITHONIA KAD 400M R3 TB SPD04 LPI	AREA FIXTURE, TYPE III, DOUBLE MOUNTED 180°	400 W METAL HALIDE, 2V658	20'

**CRITICAL AREA REFORESTATION PLANTING SCHEDULE**

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	UNIT COST	EXT. COST
16	AE	<i>Acer rubrum</i>	RED MAPLE	4-6' HEIGHT, CONT.	\$12.00	\$192.00
23	AM	<i>Ametanchar canadensis</i>	SERVICEBERRY	4-6' HEIGHT, CONT.	\$15.00	\$345.00
13	CC	<i>Carpinus caroliniana</i>	AMERICAN HORNBEEAM	4-6' HEIGHT, CONT.	\$12.00	\$156.00
131	CC	<i>Cephalanthus occidentalis</i>	BUTTERBUSH	BARE ROOT	\$1.25	\$163.75
131	CC	<i>Clethra alnifolia</i>	PEPPERBUSH	BARE ROOT	\$1.25	\$163.75
3	DV	<i>Diospyros virginiana</i>	PERSIMMON	4-6' HEIGHT, CONT.	\$12.00	\$36.00
8	IO	<i>Ilex opaca</i>	AMERICAN HOLLY	4-6' HEIGHT, CONT.	\$40.00	\$320.00
24	LI	<i>Liriodendron tulipifera</i>	TULIP TREE	4-6' HEIGHT, CONT.	\$12.00	\$288.00
131	NS	<i>Myrica cerifera</i>	WAX MYRTLE	BARE ROOT	\$1.25	\$163.75
131	NS	<i>Myrica pennsylvanica</i>	BAYBERRY	BARE ROOT	\$1.25	\$163.75
21	NS	<i>Nyssa sylvatica</i>	BLACK GUM	4-6' HEIGHT, CONT.	\$14.00	\$294.00
13	QU	<i>Quercus phellos</i>	WILLOW OAK	4-6' HEIGHT, CONT.	\$15.00	\$195.00
131	VL	<i>Viburnum corymbosum</i>	HIGHBUSH BLUEBERRY	BARE ROOT	\$1.25	\$163.75
130	VL	<i>Viburnum dentatum</i>	ARROWWOOD VIBURNUM	BARE ROOT	\$1.25	\$162.50
19	VL	<i>Viburnum lentago</i>	NANNYBERRY	4-6' HEIGHT, CONT.	\$14.00	\$266.00

**WARM SEASON GRASS MIX (23,546 SF)**

Species	Planting Rate	Quantity
<i>Avena sativa</i>	OATS (COVER CROP)	10 LBS. PER ACRE
<i>Andropogon gerardii</i>	BIG BLUESTEM, NIAGARA	6.5 LBS. PER ACRE
<i>Andropogon scoparius</i>	LITTLE BLUESTEM, CAMPER	3.5 LBS. PER ACRE
<i>Sorghastrum nutans</i>	INDIAN GRASS, RUMSEY	3.5 LBS. PER ACRE
<i>Panicum virgatum</i>	SWITCH GRASS, CAVE-IN-ROCK	1.5 LBS. PER ACRE

**GENERAL PLANTING SCHEDULE**

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
28	AA	<i>Aronia arbutifolia 'Brilliantissima'</i>	RED CHOKEBERRY	18-24" HEIGHT, CONT.
9	AC	<i>Acer rubrum 'Armstrong'</i>	ARMSTRONG RED MAPLE	1.5" CAL. B & B
2	AD	<i>Acer rubrum 'October Glory'</i>	OCTOBER GLORY RED MAPLE	3" CAL. B & B
4	AR	<i>Acer rubrum 'Red Sunset'</i>	RED SUNSET RED MAPLE	3" CAL. B & B
77	DC	<i>Deschampsia caespitosa</i>	TUFTED HAIR GRASS	1 GALLON CONT.
23	HQ	<i>Hydrangea quercifolia 'Slate's Dawn'</i>	SLATE DWARF CORKLEAF HYDRANGEA	18-24" HEIGHT, CONT.
29	IG	<i>Ilex glabra 'Shamrock'</i>	SHAMROCK INEBERRY	18-24" HEIGHT, CONT.
1	LS	<i>Liquidambar styraciflua 'Rotundiloba'</i>	SEEDLESS SWEET GUM	2.5" CAL. B & B
12	LT	<i>Liriodendron tulipifera 'Fastigiatum'</i>	FASTIGIATE TULIP TREE	1.5" CAL. B & B
4	QC	<i>Quercus coccinea</i>	SCARLET OAK	2.5" CAL. B & B
3	QF	<i>Quercus falcata</i>	SOUTHERN RED OAK	2.5" CAL. B & B
2	QP	<i>Quercus phellos</i>	WILLOW OAK	2.5" CAL. B & B
34	VD	<i>Viburnum dentatum 'Blue Muffin'</i>	BLUE MUFFIN VIBURNUM	18-24" HEIGHT, CONT.



APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 QA Co. DEPT. OF PUBLIC WORKS

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 QA Co. SOIL CONSERVATION SERVICE

**REVISIONS**

REV. #	DATE	DESCRIPTION
1	11/18/08	PER COUNTY COMMENTS OF 12/11/07
2	4/8/08	PER COUNTY COMMENTS OF 2/13/08
3	5/1/08	PER COUNTY COMMENTS OF 4/22/08

DATE: NOVEMBER, 2007  
 JOB NUMBER: D1050429  
 SCALE: 1" = 20'  
 DRAWN BY: LAS  
 DESIGNED BY: LAS  
 APPROVED BY: S.E.L.  
 FOLDER REFERENCE: 324

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 CENTREVILLE, MARYLAND 21617  
 (410) 758-2237 • FAX (410) 758-2464

LANDSCAPE PLAN

FOR: **JULEO, LLC**

FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

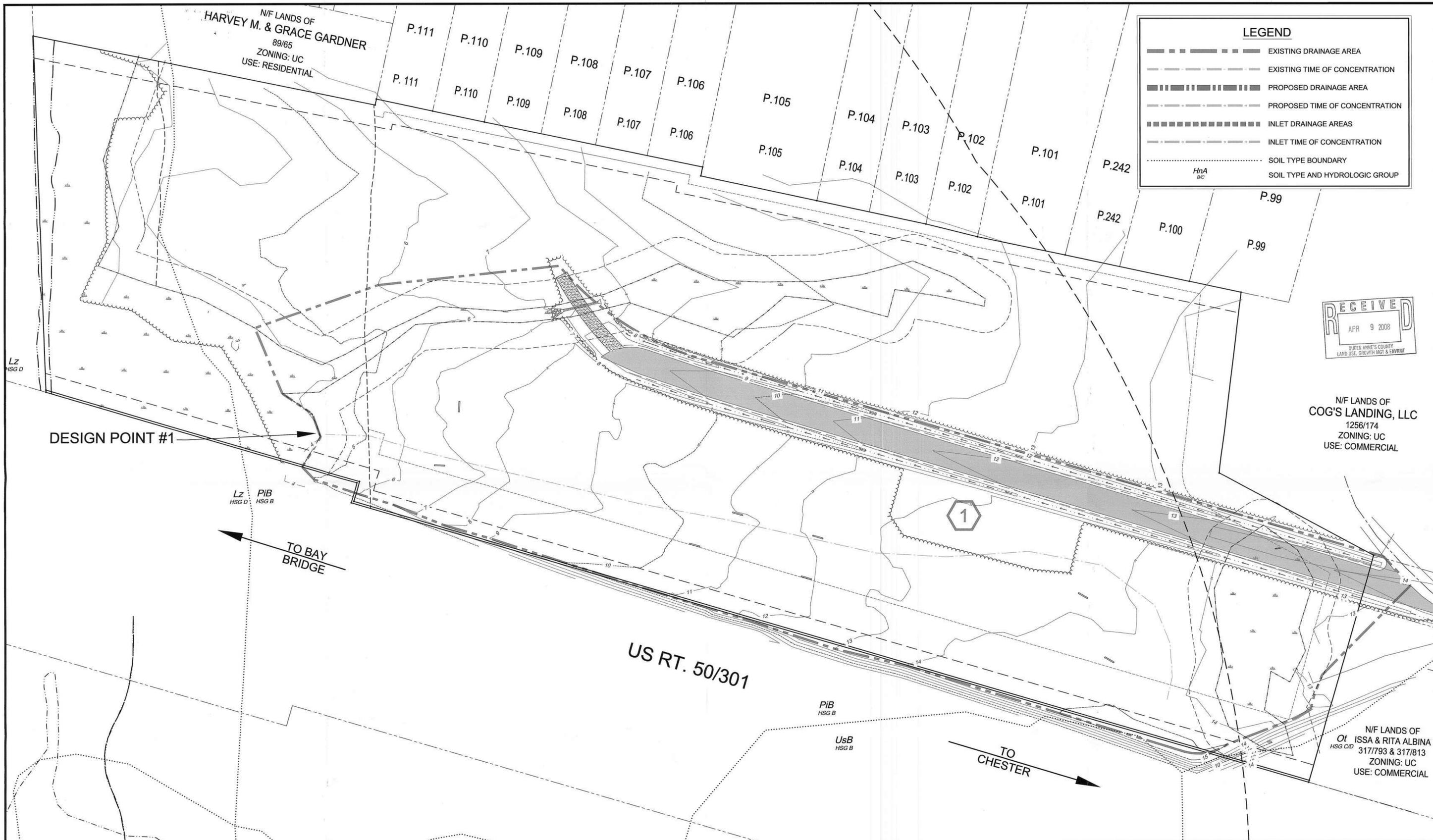
TAX MAP - 56, GRID - 6, PARCEL - 250, PARCEL 1  
 PREPARED FOR: JULEO, LLC

SHEET NO.: **11** OF **14**

FILE NO.: D1050429\_10-11\_LNDSCP.dwg

PLOTTED: Apr 30, 2008 - 3:55pm  
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 Tab11





LEGEND	
	EXISTING DRAINAGE AREA
	EXISTING TIME OF CONCENTRATION
	PROPOSED DRAINAGE AREA
	PROPOSED TIME OF CONCENTRATION
	INLET DRAINAGE AREAS
	INLET TIME OF CONCENTRATION
	SOIL TYPE BOUNDARY
	SOIL TYPE AND HYDROLOGIC GROUP



N/F LANDS OF  
**COG'S LANDING, LLC**  
 1256/174  
 ZONING: UC  
 USE: COMMERCIAL

N/F LANDS OF  
 Of **ISSA & RITA ALBINA**  
 HSG C/D 3177/93 & 317/813  
 ZONING: UC  
 USE: COMMERCIAL

DESIGN POINT #1

Lz HSG D  
 PiB HSG B

TO BAY  
 BRIDGE

US RT. 50/301

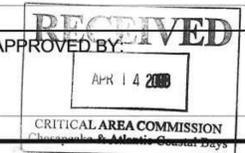
PiB HSG B

UsB HSG B

TO  
 CHESTER



APPROVED BY:



APPROVED BY:

QA Co. DEPT. OF PUBLIC WORKS  
 APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 QA Co. SOIL CONSERVATION SERVICE  
 APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

REVISIONS

REV. #	DATE	DESCRIPTION
1	1/18/08	PER COUNTY COMMENTS OF 12/11/07
2	4/8/08	PER COUNTY COMMENTS OF 2/13/08

DATE: NOVEMBER, 2007  
 JOB NUMBER: D1050429  
 SCALE: 1"=40'  
 DRAWN BY: J.S.K.  
 DESIGNED BY: J.S.K.  
 APPROVED BY: S.E.L.  
 FOLDER REFERENCE: 324

SEAL \_\_\_\_\_ DATE \_\_\_\_\_

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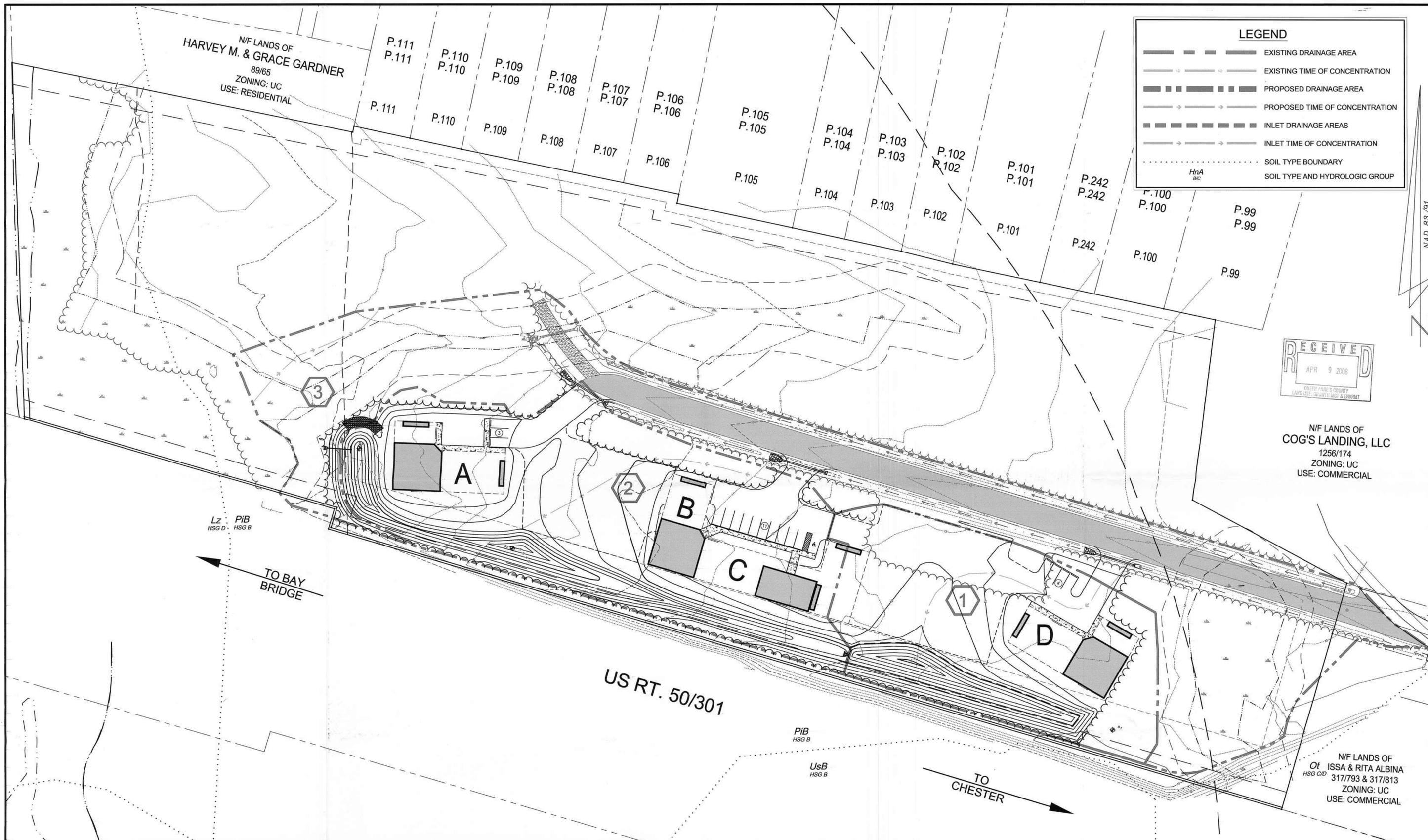
PRE-DEVELOPMENT DRAINAGE AREA MAP

FOR:  
**JULEO, LLC**  
 FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
 TAX MAP - 56, GRID - 6, PARCEL - 250  
 PREPARED FOR: JULEO, LLC

SHEET NO.:

1 OF 3

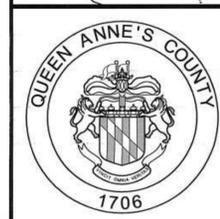
FILE NO.:



**RECEIVED**  
APR 9 2008  
QUEEN ANNE'S COUNTY  
LAND USE, SUBDIVISION & ENVIRONMENT

N/F LANDS OF  
COG'S LANDING, LLC  
1256/174  
ZONING: UC  
USE: COMMERCIAL

N/F LANDS OF  
ISSA & RITA ALBINA  
317/793 & 317/813  
ZONING: UC  
USE: COMMERCIAL



APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
QA Co. DEPT. OF PUBLIC WORKS  
APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
QA Co. SOIL CONSERVATION SERVICE

REVISIONS		
REV. #	DATE	DESCRIPTION
1	1/18/08	PER COUNTY COMMENTS OF 12/11/07
2	4/8/08	PER COUNTY COMMENTS OF 1/27/08

**RECEIVED**  
APR 14 2008  
CENTRAL AREA COMMISSION  
Coastal Bays

DATE: NOVEMBER, 2007  
JOB NUMBER: D1050429  
SCALE: 1"=40'  
DRAWN BY: J.S.K.  
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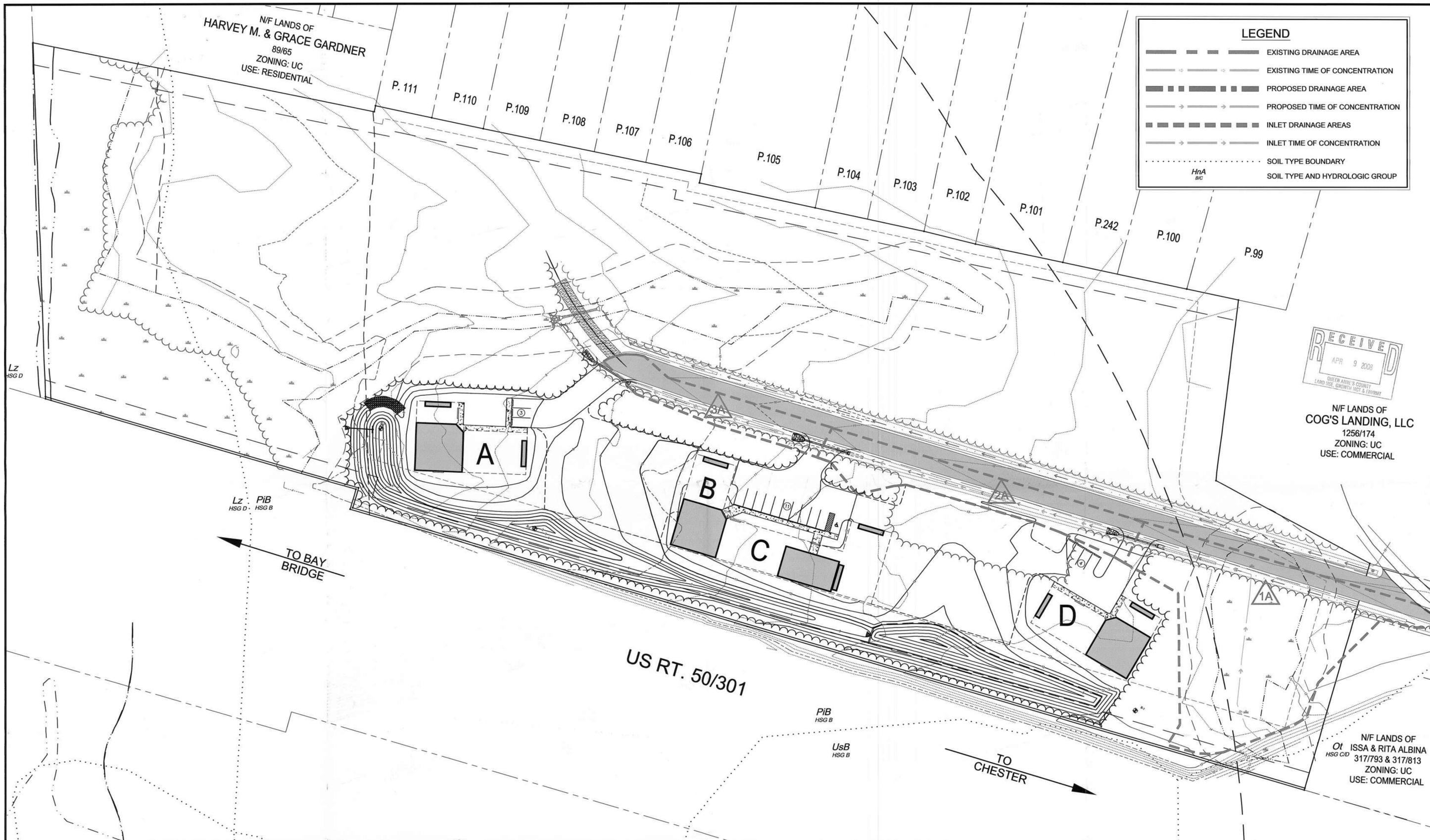
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POST-DEVELOPMENT DRAINAGE AREA MAP  
FOR:  
**JULEO, LLC**  
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
TAX MAP - 56, GRID - 6, PARCEL - 250  
PREPARED FOR: JULEO, LLC

SHEET NO.:  
**2 OF 3**  
FILE NO.:

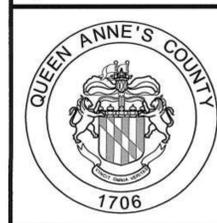


LEGEND	
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	PROPOSED DRAINAGE AREA
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 Of ISSA & RITA ALBINA  
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APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_  
 DATE: APR 14 2008  
 CRITICAL AREA COMMISSION  
 Chesapeake & Atlantic Coastal Bays

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 QA Co. DEPT. OF PUBLIC WORKS  
 QA Co. SOIL CONSERVATION SERVICE

REVISIONS		
REV. #	DATE	DESCRIPTION
1	1/16/08	PER COUNTY COMMENTS OF 12/11/07
2	4/8/08	PER COUNTY COMMENTS OF 2/13/08

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CULVERT DRAINAGE AREAS  
 FOR:  
**JULEO, LLC**  
 FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND  
 TAX MAP - 56, GRID - 6, PARCEL - 250  
 PREPARED FOR: JULEO, LLC

SHEET NO.:  
**3 OF 3**  
 FILE NO.: