

**Critical Area Commission  
Meeting At  
Department of Housing and Community Development  
Crownsville, Maryland  
September 1, 2004**

**AGENDA**

1:00 p.m. – 1:05 p.m.	<b>Welcome and Remarks</b>	<b>Chairman Martin G. Madden</b>
	<b>Approval of Minutes for August 4, 2004</b>	

**PROGRAMS**

1:05 p.m. – 1:25 p.m.	<b>VOTE: Queen Anne's County / K. Hovnanian Four Seasons Buffer Management Plan</b>	<b>Regina Esslinger Ren Serey</b>
1:25 p.m. – 1:40 p.m.	<b>VOTE: Worcester County Bay Point Plantation Growth Allocation</b>	<b>Mary Owens Ren Serey</b>
1:40 p.m. – 1:55 p.m.	<b>VOTE: Worcester County Buffer Management Area Group E</b>	<b>Mary Owens Ren Serey</b>

**PROJECTS**

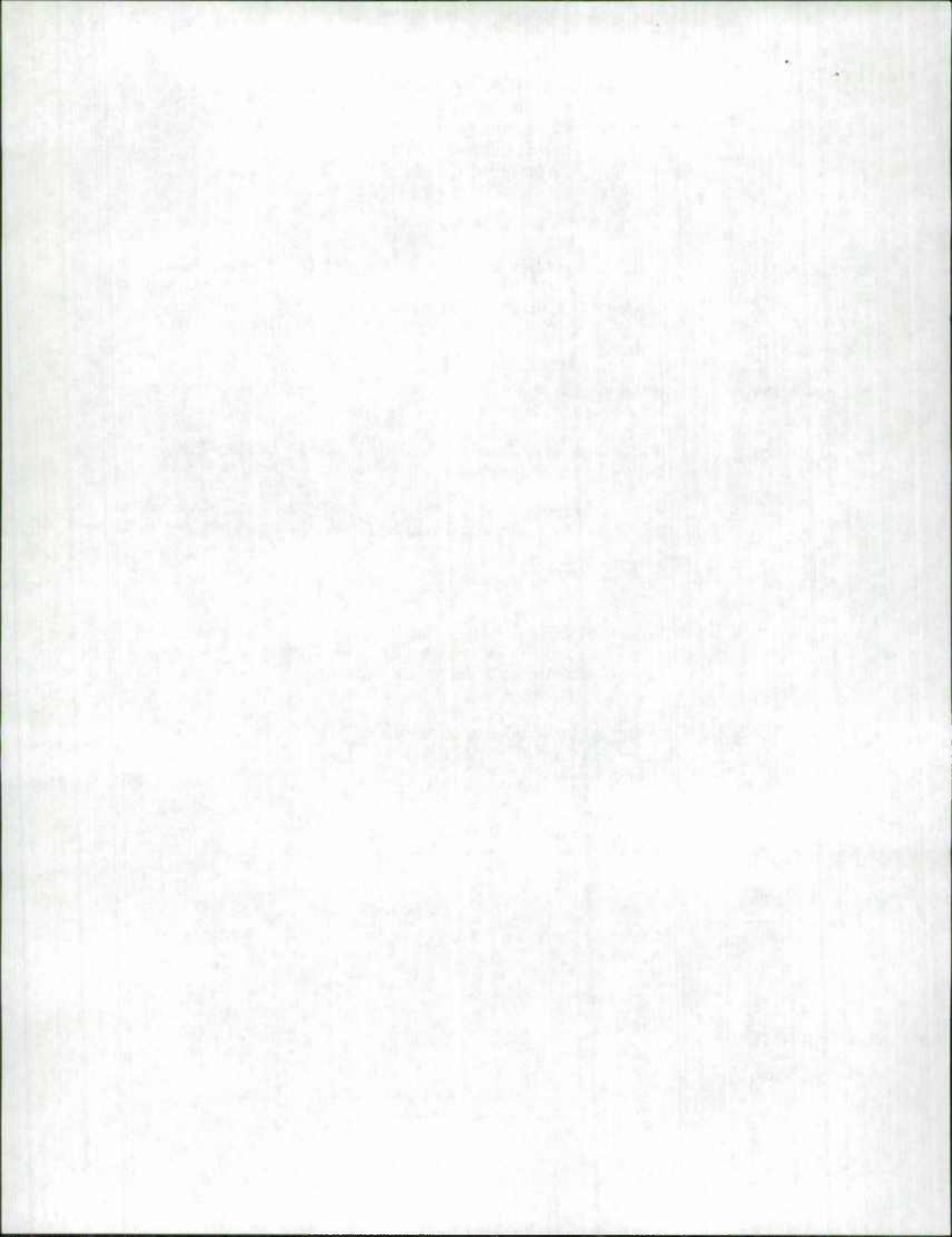
1:55 p.m. – 2:15 p.m.	<b>VOTE: Department of Natural Resources / Erickson Foundation: NorthBay Environmental Center – Classroom Building (Elk Neck State Park, Cecil County)</b>	<b>Regina Esslinger</b>
2:15 p.m. – 2:25 p.m.	<b>VOTE: Maryland Port Administration Coaches Island Shoreline Stabilization (Talbot County)</b>	<b>Kerrie Gallo</b>
2:25 p.m. – 2:35 p.m.	<b>Department of Natural Resources: Susquehanna State Park – Canoe Launch</b>	<b>Dawnn McCleary</b>

**OLD BUSINESS**

2:35 p.m. – 2:45 p.m.	<b>Somerset County: Growth Allocation Withdrawal</b>	<b>Kerrie Gallo</b>
	<b>Legal Update</b>	

**NEW BUSINESS**

2:45 p.m. – 2:50 p.m.		<b>Chairman Martin G. Madden</b>
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**PANELS**

10:00 a.m. – 11:15 a.m. Panel: Worcester County  
Bay Point Plantation Growth Allocation  
Buffer Management Area - Group E Designation

*Members: Jackson, Dawson, Evans, Gordy, Prettyman*

11:15 a.m. – 12:00 p.m. Panel: Town of St. Michaels: Discussion - Miles Point III Growth Allocation  
Conceptual Stormwater Management Plan

*Members: Setzer, Blazer, Richards, Jackson, Evans*

**SUBCOMMITTEES**

10:30 a.m. – 12:00 p.m. Project Evaluation Subcommittee

*Members: Setzer, Andrews, Booker Jones, Chambers, Cox, Jackson, McLean, Mathias, Rice, Rolley, Wilson*

Queen Anne's County: Four Seasons Buffer Management Plan

Regina Esslinger  
Ren Serey

Department of Natural Resources / Erickson Foundation  
North Bay Environmental Center: Classroom Building  
(Elk Neck State Park – Cecil County)

Regina Esslinger

Maryland Port Administration: Coaches Island Shoreline Stabilization  
(Talbot County)

Kerrie Gallo

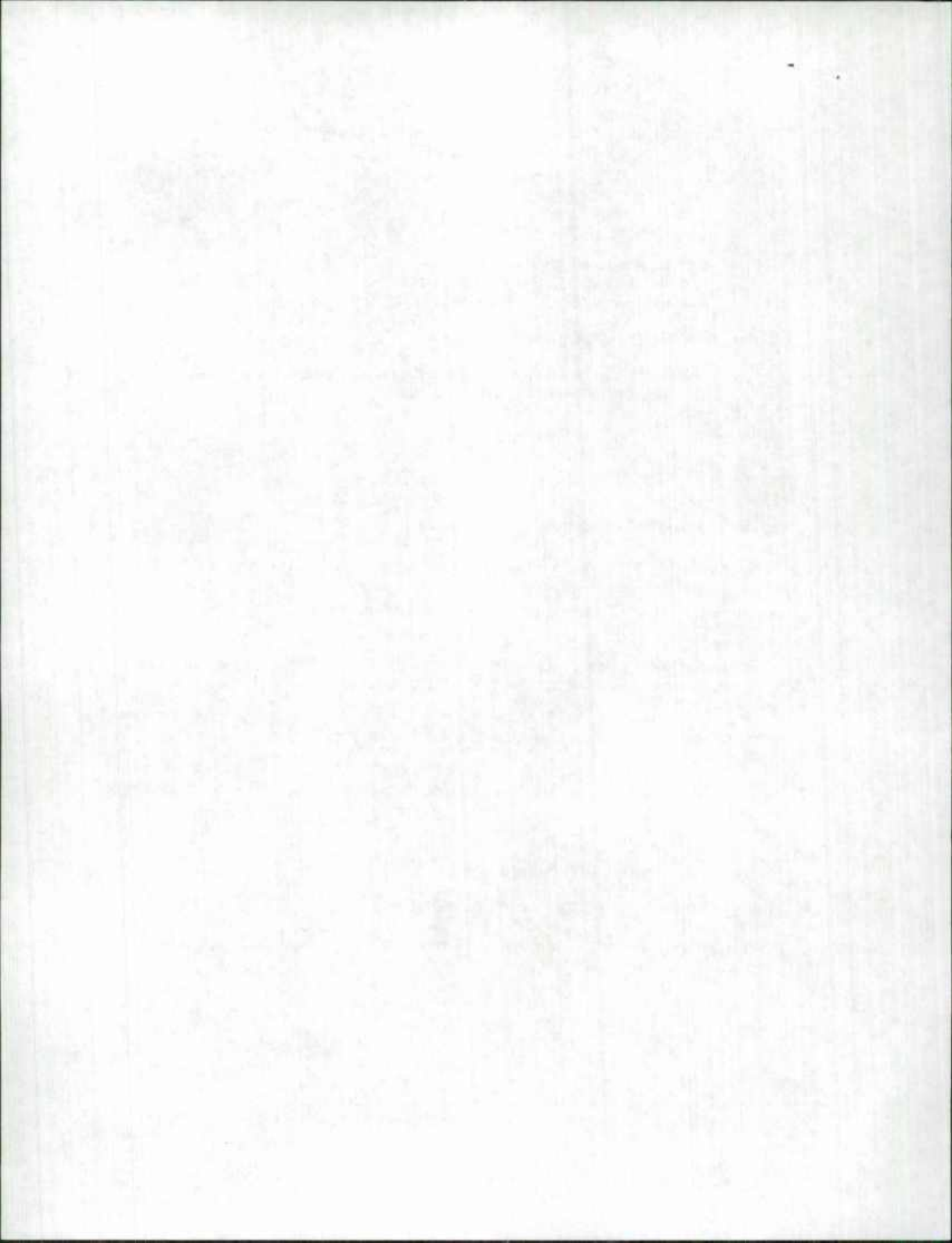
Department of Natural Resources: Susquehanna State Park  
Canoe Launch

Dawnn McCleary

**Program Implementation Subcommittee**

THERE IS NO PROGRAM SUBCOMMITTEE THIS MONTH.

*Members: Blazer, Bailey, Dawson, Evans, Ennis, Gordy, Ladd, Lawrence, McKay, Mayer,  
Prettyman, Richards*





**Critical Area Commission**  
**For the Chesapeake and Atlantic Coastal Bays**  
**People's Resource Center**  
**100 Community Place**  
**Crownsville, Maryland**  
**August 4, 2004**

*Bramble  
Wilson  
C/n*

The full Critical Area Commission met at the People's Resource Center Crownsville, Maryland. The meeting was called to order by Chairman Martin G. Madden with the following Members in

**Attendance:**

Dave Blazer, Worcester County Coastal Bays  
Glenn L. Bramble, Dorchester County  
Ella Ennis, Calvert County  
Judith Evans, Western Shore Member at Large  
Joseph Jackson, Worcester County, Chesapeake Bay  
Gail Booker Jones, Prince George's County  
Thomas McKay, St. Mary's County  
Daniel Mayer, Charles County  
Stevie Prettyman, Wicomico County  
William Rice, Somerset County  
Cathleen Vitale, Anne Arundel County  
Douglas Wilson, Harford County  
Rowland Agbede for Louise Lawrence, Maryland Department of Agriculture  
Gary Setzer, Maryland Department of the Environment  
Jim McLean, Md. Depart of Business and Economic Development  
Meg Andrews, Maryland Department of Transportation  
Frank Dawson, Maryland Department of Natural Resources  
Michael Mielke, Talbot County

**Not In Attendance:**

Margo Bailey, Kent County  
Dr. Earl Chambers, Queen Anne's County  
Judith Cox, Cecil County  
Tracey Gordy, Department of Planning  
Allison Ladd, Dept. Housing and Community Development  
Edwin Richards, Caroline County  
James N. Mathias, Jr., Ocean City  
Otis Rolley, Baltimore City

Chairman Madden presented Governor's citations to departing Commission members Barbara Samorajczyk, former Anne Arundel County representative, and Ed Gilliss, former Baltimore County representative. The Chairman introduced the Commission's newest member, Stephen Michael Mielke, representing Talbot County. The Chairman recognized Rowland Agbede representing the Maryland Department of Agriculture for Louise Lawrence. He extended thanks and appreciation to the Commission members who served on the Cambridge and Snow Hill panels.

Commissioner Bramble moved to approve the Minutes of May 5<sup>th</sup>, 2004 as written. The motion was seconded by Commissioner Dawson and unanimously carried.

Critical Area Commission Minutes

August 4, 2004

**Anne Arundel County:** Lisa Hoerger presented for **VOTE** the proposal by the Anne Arundel County Department of Public Works (DPW) to replace the Broadwater Reclamation Facility Dewatering Project, located in Churchton in South County. She told the Commission that in December 2002, the DPW was granted a conditional approval by the Commission to install new measures to increase plant efficiency and the safety of operations and enhance the treatment process performance and operations. The current proposal will replace deteriorating sludge dewatering equipment and expand the odor control capabilities of the Broadwater Reclamation facility. Ms. Hoerger described the modifications to upgrade the equipment. Because these improvements are located within the expanded Buffer for hydric soils, the project must be reviewed through the Commission's conditional approval process. She said that the site is 21.8 acres with 18 acres inside the Critical Area, of which 9.3 acres are in the RCA and 8.7 acres are in the LDA. The upgrades will include an addition to an existing building and the installation of equipment outside the buildings. There are no known Habitat Protection Areas except for the expanded Buffer. No clearing is proposed. Overall, there will be a net decrease of 30 square feet of impervious surface in the Critical Area and a net increase of 1,260 sq. feet of impervious surface outside the Critical Area. The applicant has proposed mitigation at a 3:1 ratio for the new area of impervious surface in the Critical Area Buffer. The applicant has an approved sediment and erosion control plan and stormwater management plan. No permits are required from Maryland Department of the Environment, as no wetlands will be impacted. A variance has been approved by Anne Arundel County with the following conditions: 1. There shall be no net increase in impervious coverage in the Critical Area. 2. The applicant shall provide landscaping, mitigation and best stormwater management practices as determined by the County's Permit Application Center. 3. The project is subject to conditional approval by the Critical Area Commission. Ms. Hoerger summarized how this proposal meets the characteristics for a conditional approval. The Commission staff recommends approval with the following conditions: 1. The Department of Public Works perform 3:1 mitigation for the new areas of impervious surface in the expanded Buffer with a mix of native trees and shrubs. 2. The Department of Public Works shall install appropriate stormwater best management practices to treat runoff from the new and modified structures to provide additional water quality benefits to the site. **Gary Setzer moved to conditionally approve the improvements to the Broadwater Reclamation Facility in the expanded Buffer in accordance with the Staff report (attached to and made a part of the Minutes including the following conditions: 1) 3:1 mitigation for the new areas of impervious surface in the expanded Buffer with a mix of native trees and shrubs; 2) appropriate stormwater management practices are installed to treat the new and modified structures. As required by Code of Maryland Regulations, this motion is based on the following factors: 1) The extent to which the project is in compliance with the requirements of the relevant chapters of the subtitle: Other than impacts to the 100-foot Buffer, which has been expanded due to hydric soils, the project is otherwise in compliance. In addition, project impacts have been minimized by reducing the footprint of the replacement building, which results in a 30 square foot reduction of impervious surface within the Critical Area. 2) The adequacy of mitigation proposed to address the requirements of this subtitle that cannot be met by the project: Although there has been an overall decrease of 30 square feet of impervious area in the Critical Area, the project includes mitigation at a 3:1 ratio for the new area of impervious surface. 3) The extent to which the project including any mitigation measures provides substantial public benefits to the overall Critical Area Program: The public benefits of the project include improved processing of plant solids and enhanced equipment reliability; increased operation**



August 4, 2004

**flexibility; and a reduction of odor leaving the site. In addition, the project will improve stormwater management at the site and provide additional water quality benefits. The motion was seconded by Joe Jackson and carried unanimously.**

**Cecil County:** Regina Esslinger presented for VOTE the approval of the consolidation of three buildings into one building as a result of further site design development at the North Bay Environmental Education Camp, proposed by the Erickson Foundation and the Department of Natural Resources at Elk Neck State Park in Cecil County. Final conditional approval was granted for the North Bay Environmental Education Camp at the April 7, 2004 Commission meeting. As was originally proposed, none of the structures of the consolidation were in the expanded Buffer or on steep slopes. Impervious surface on the site was to be 12.76% and will be increased 633 square feet, bringing the total to 12.8%. No additional clearing is necessary and no changes are needed to the MDE permits. On April 7, 2004 when the Commission determined that four conditions (stated in the Staff report attached to and made a part of these Minutes) had been met with the final design, and that the proposed changes do not adversely affect the fulfillment of these conditions. **Gary Setzer moved to approve the 633 square foot increase in impervious surface associated with the consolidation of the buildings and the reconfiguration of parking at the North Bay Environmental Education Camp in accordance with the Staff Report. The motion was seconded by Jim McLean and unanimously carried.**

**City of Cambridge (Dorchester County):** Wanda Cole presented for VOTE the amendments to the Cambridge Zoning Ordinance for the six-year comprehensive review of the City's Critical Area Program. The proposed changes correct typographical errors; eliminate redundancy; clarify provisions to ensure consistency with the State Criteria; add new provisions for growth allocation; and eliminate sections that would preclude long-term build-out and phased-in projects. The changes do not include the recent amendments to the Critical Area Law regarding definition of dwelling unit; clarifying the variance language; providing for protection of the Buffer; and adding provisions for increased enforcement penalties. Therefore, Commission staff expedited a full comprehensive review of the City's program and developed a list of necessary amendments and language to address them to ensure consistency with the State law and criteria. The changes developed by staff are proposed as conditions to the Commission's approval and have been reviewed by the Commission's panel, and the Cambridge City staff and City Attorney. Ms. Cole summarized the changes for the Commission (included in the staff report, attached to and made a part of these Minutes.) She said that the City's Program was first adopted in 1988 and revised in 1998 but that there were no ordinance changes at that time. **Jim McLean moved, on behalf of the panel, to approve the amendments to the Cambridge Zoning Ordinance with the conditions included in the staff report. The motion was seconded by Meg Andrews and unanimously carried.**

**City of Cambridge:** (Dorchester County): Wanda Cole presented for VOTE the Maple Dam Road Mapping Mistake Amendment proposed by the City of Cambridge. The proposal would change approximately 100 acres from Resource Conservation Area (RCA) to Intensely Developed Area (IDA) by virtue of a mistake in the original map designation. The 100 acres in question were originally mapped by Dorchester County, which believed at that time that the land was within its jurisdiction. The City of Cambridge has since determined 1) that the area is within the municipal boundaries of Cambridge; and 2) that it was a mistake not to designate the area



Critical Area Commission Minutes  
August 4, 2004

IDA based on the institutional development on the western side of the road. The Commission staff has reviewed information submitted by the City to determine if the area satisfied the mapping criteria for IDA at the time of original mapping. Marianne Mason, Commission Counsel, stated that in evaluating map amendments that involve the correction of mistakes made during the original Critical Area mapping, local governments are guided by the Court of Special Appeals decisions in *North vs. Kent Island Joint Venture* and *August Bellanca v. County Commissioners of Kent County*. The Commission's role in reviewing these amendments is one of oversight, to determine "whether the rezoning meets the established criteria (for an IDA) and whether the property satisfies the definition of IDA as set forth in the criteria. It is the responsibility of the City of Cambridge to determine that a mistake occurred and that the property should have been designated IDA. It is then the responsibility of the Commission to determine that at the time of original mapping (1988), the area met the criteria for IDA. Based on the information submitted and a review of Soil Conservation District aerial photography from the late 1980s, the Commission's Panel appointed to hold a public hearing and consider the matter determined that the area did not have the features necessary to designate it as IDA. Commission Program Chief Mary Owens and Commission Counsel Marianne Mason explained how this amendment does not meet the criteria for IDA (set forth in the staff report attached to and made a part of these Minutes). According to the Natural Heritage Division of DNR, the wetland areas of the site are part of the Little Blackwater River Habitat Protection Area, which historically provided habitat for three State-listed plant species. An additional survey was performed in December 1999 by DNR, which recommended that the area maintain its designation as a Habitat Protection Area even though the species present was no longer on the State's threatened list. **Jim McLean moved on behalf of the Panel to Disapprove the map amendment request to change the designation from RCA to IDA for Maple Dam Road property for the reasons stated: 1) that the housing density is not equal to or greater than four dwellings per acre; 2) that industrial, institutional, or commercial uses were not concentrated in the area and 3) that based on information submitted and a review of Soil Conservation District aerial photography from the late 1980s, it is not clear that the property had any of the features necessary to designate it as IDA. The motion was seconded by Joe Jackson and unanimously carried.**

**Town of Queenstown:** Roby Hurley presented for **Concurrence with the Chairman's Determination of Refinement** a local map amendment to rectify a mapping mistake that involved the designation of 11 parcels of land as a Limited Development Area (LDA), which the Town of Queenstown determined should have been designated an IDA. There are two subject areas, both located adjacent to existing IDA and the Critical Area boundary. Mr. Hurley said that the Town believes the mistake occurred because the properties were not thoroughly evaluated and were hastily included in the adjoining residential area which was mapped LDA. In 1985 both areas included commercial or institutional uses. At the time of original mapping, IDAs were those areas where residential, commercial, institutional, and/or industrial developed land uses predominated, and where relatively little natural habitat occurred. The Planning Commission found that in 1985 the subject areas met the mapping standards for the IDA, particularly that the residential densities exceeded three dwelling units per acre with public sewer and water, and that a mistake was made in designating them LDA. **The Commission supported the Chairman's determination of Refinement.**



August 4, 2004

**Dorchester County:** Wanda Cole presented for **Concurrence with the Chairman's Determination of Refinement** 18.088 acres of growth allocation requested by Taylor's Island Marina in Dorchester County. The request will change the Critical Area Overlay designation of 10.604 acres of land from RCA to IDA, and 7.484 acres from LDA to IDA. The change in designation is to allow an existing marina to expand its area of operations to meet the increasing demands of nearby communities for boat hauling and storage service. This request was approved by the County Planning Commission and County Council. The new IDA is adjacent to existing LDA, which has been designated a Buffer Exemption Area (BEA). The project will not impact tidal wetlands or the Delmarva Fox Squirrel habitat. Design work has begun to address the 10% pollutant removal requirement applicable to IDAs. The request is consistent with the Commission's Policy on Growth Allocation and the Criteria. **The Commission supported the Chairman's determination of Refinement.**

## Old Business

**Easton Village (Talbot County):** Lisa Hoerger gave an update on the Easton Village project. She said the property, which contained two parcels, was annexed into the Town of Easton in 1999. The Commission approved a growth allocation project on each parcel in January 2004. One growth allocation was for Lot 16 for the Easton Village Planned Unit Development. The second growth allocation was for the Ratcliffe Manor Farm subdivision consisting of 15 lots. The discussion is regarding Lot 16, a 250-unit subdivision. The developer redesigned the subdivision layout, which resulted in some minor manipulation of the boundaries of the growth allocation envelope. The boundaries will change for the redesign but have been adjusted in other areas so there will be no net change in the 97.20 acres of growth allocation to change Resource Conservation Area to an Intensely Developed Area that was approved by the Commission, County Council and Town Council. The Town endorses the changes, which, because they are so minor, do not need to go through the local public process. As a condition of the approval of the growth allocation for the Easton Village project, the Commission required the developer to bring the Buffer Management Plan and Habitat Protection Plan back for review and approval by the Commission, which will occur once those plans are submitted.

**Chesapeake Beach (Calvert County):** Julie LaBranche gave an update on the Town of Chesapeake Beach's development of a Forest and Developed Woodland Mitigation Plan, which will address forest mitigation for a water tower project in the Critical Area and future Town needs for mitigation sites. The Commission staff has worked with the Town to come up with a suitable mitigation site in the Town or in the County but the Town has had difficulty finding mitigation sites in the past. The Commission agreed to accept an alternative form of mitigation to meet the mitigation requirements of a project in the form of a "Master Plan" that will provide for an inventory of mitigation sites for the Town to satisfy the mitigation requirement for the water tower project and for future mitigation. In February 2004, Chairman Madden entered into a Memorandum of Understanding with the Town to provide for this plan which was to be submitted by August 1, 2004, and finalized by December 1, 2004. The Town has requested a formal extension in time for submittal to September 15, 2004, retaining the December 1 date for finalizing the plan. The Chairman granted the extension and has sent a letter to that effect.



**Legal Update:**

Marianne Mason updated the Commission on legal matters.

**Wicomico County:** She said that in the Lewis case in Wicomico County, Mr. Lewis went through the variance process for six buildings that he had built without any permits and has lost at every step until he got to the State's highest court last summer which remanded the case back to the local zoning board for a re-hearing. The case was argued again in Wicomico County before the Board of Appeals on remand without any testimony but hearing only argument of Counsel. The Lewis case was the reason for the legislation passed by the General Assembly in the most recent session. Although the new law applies to all cases as of June 1st, the Lewis case itself is still governed by the Court of Appeals decision. The Board ruled in May that they were again denying Mr. Lewis's variances. He appealed again and it is back in Circuit Court for review of the Board's new decision to deny the variances.

**Talbot County:** The County has sued the Commission over the Commission's disapproval of the County's program amendment concerning the use of growth allocation. A motion was filed to dismiss the lawsuit, the county filed a response and an amended complaint was filed. Another response from the Commission is due at the end of August.

**Talbot County:** The developer of Miles Point III has sued the Commission in Talbot County Circuit Court challenging the Commission's approval with conditions for the Miles Point III development at St. Michaels. The developers claimed that the Commission did not have authority to impose conditions on an award of growth allocation and asked the Court to declare the project "approved with no conditions." A motion was filed on procedural grounds. The developer has refiled the complaint and the Commission's response is due at the end of the month.

**Town of Indian Head:** Ms. Mason said that there is a project in the Town of Indian Head that is under construction on a property that is designated Limited Development Area but it is being developed quite intensely with forest clearing in excess of 45% of the site, and needs growth allocation to permit the intense development. Ren Serey, Executive Director, explained the situation to the Commission. He said that the Commission staff had reviewed the subdivision about a year ago and in that review the Town was advised of several items regarding the actual subdivision and that the project would need growth allocation. The growth allocation was never awarded by the Town or presented to the Commission but the Town approved the subdivision and issued permits for construction of homes. The Town has had some discussion and ultimately a resolution with the Charles County Commissioners regarding the growth allocation, and the growth allocation has been provided to the Town. The Town has not yet submitted a request for program amendment to the Commission. The Town proceeded while maintaining that they had growth allocation but that they did not really need to ask the County Commissioners for it, and construction began before the award of growth allocation. Ms. Mason said that the staff has been meeting with the Town to try to move matters along but that the law provides for the Chairman to notify the Town formally if the Chairman determines that a project is in violation of the Critical Area law. The Chairman has sent a letter notifying the Town that there are violations and that they need to take action within 30 days and let the Commission know what they plan to do.



### **New Business**

The Chairman announced that a retreat for the Commission is scheduled for September 22<sup>nd</sup>, 2004 at the University of Maryland, Wye Research Center, in Queen Anne's County. He told them that an Agenda would be forthcoming and asked the Commission members for topics that would be of interest to them.

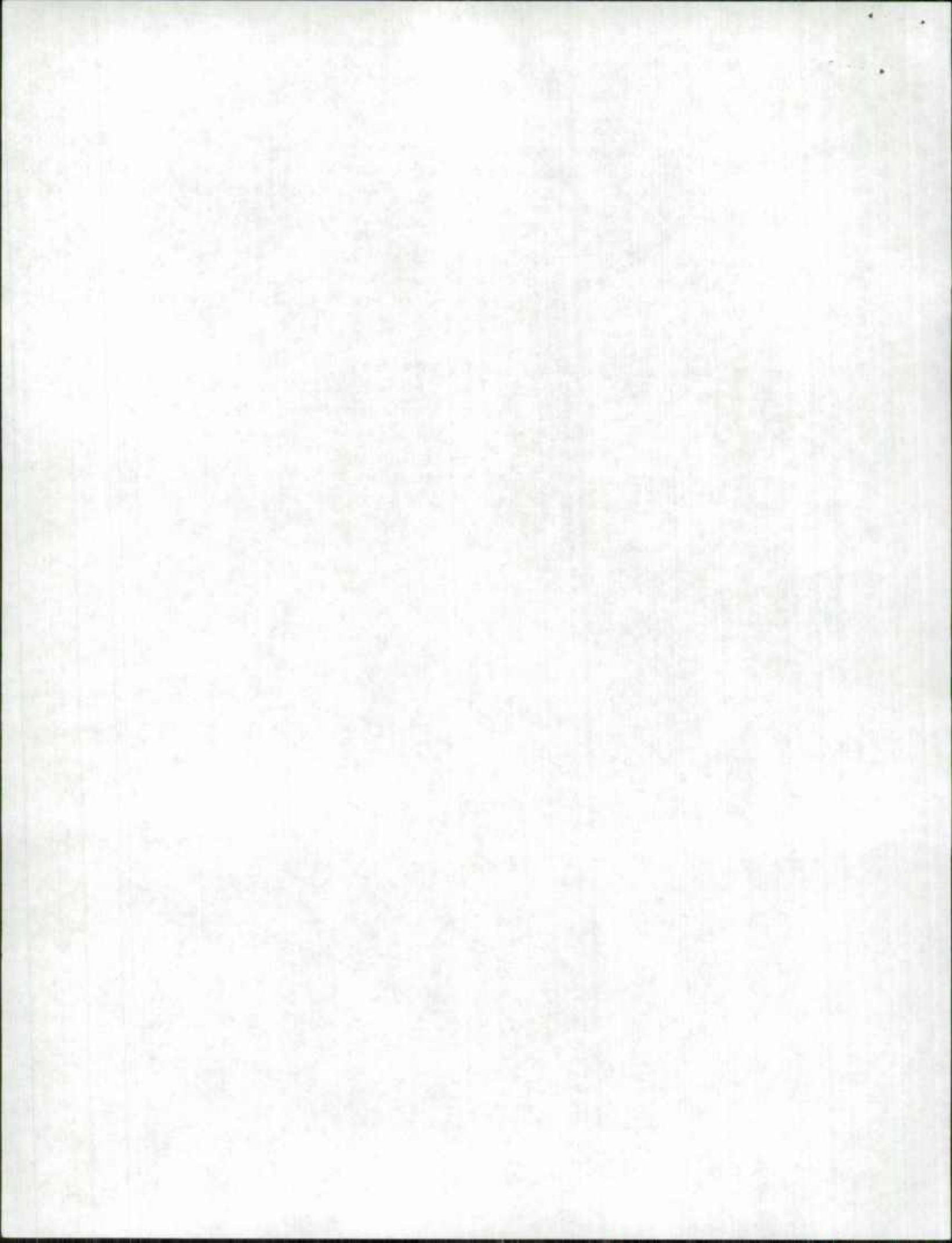
Senator Madden said that he, Ren and Marianne Mason would be making a presentation at the MACCO Conference in Ocean City this year, Thursday, the 19<sup>th</sup> of August, 11:30 a.m. until 1:00 p.m. It will be a question and answer period on the new legislation that was effective on June 1, 2004.

Chairman Madden announced that at the next meeting there will be an informal luncheon discussion on a topic not yet decided, relating to Critical Area matters, for those who are interested in participating. He said that this may be an ongoing activity if the Commission members are receptive to the idea.

The Chairman informed the Commission members that the next meeting will be held on September 1, 2004 and asked them to confirm their attendance as this is near a holiday time.

There being no further business the meeting adjourned

Minutes submitted by: Peggy Campbell, Commission Coordinator





## *Critical Area Commission*

**STAFF REPORT**  
**September 1, 2004**

**APPLICANT:** Maryland Port Administration

**PROPOSAL:** Shoreline Stabilization of Coaches Island-Northwestern Shore

**JURISDICTION:** Talbot County

**COMMISSION ACTION:** Vote

**STAFF RECOMMENDATION:** Approval with Conditions

**STAFF:** Kerrie Gallo

**APPLICABLE LAW/  
REGULATIONS:** COMAR 27.02.02 State and Local Agency Actions Resulting in Development on Private Lands  
COMAR 27.02.05 State Agency Actions Resulting in Development on State-Owned Lands

### **DISCUSSION:**

The Maryland Port Administration (MPA) is seeking approval of a project on Coaches Island to perform shoreline stabilization on the northwestern shore. Coaches Island lies directly adjacent to the west of Poplar Island, and is experiencing erosion resulting in near vertical shoreline banks along certain portions of the shoreline.

The MPA proposes to implement a plan to stabilize the northwestern shoreline of Coaches Island beach adjacent to Poplar Harbor, by planting emergent tidal vegetation in replenished sand and sediment, and by constructing a shore-attached breakwater to minimize future beach erosion. The project involves the placement of approximately 2,500 cubic yards of sand fill, to be pumped hydraulically from a sand stockpile at Poplar Island to a stockpile in the easement area on Coaches Island, and pushed into place with heavy equipment. The 100-foot long, rock shore-attached breakwater will be constructed adjacent to the existing rock revetment, and will be oriented east-to-west extending approximately 45 degrees out from the existing shoreline.

The proposed project affects land that lies both below Mean High Water (MHW), and above MHW. The portion lying below MHW falls under the requirements for a State Agency action resulting in development on State-owned lands and therefore requires

Commission approval. However, since Coaches Island is privately owned, the portion of the site lying above MHW requires a consistency determination by the Talbot County Office of Planning and Zoning for State Agency actions resulting in development on privately owned lands. The consistency determination will ensure the project is consistent with the County's local Critical Area Program.

MPA has stated that no clearing of the Buffer will be required for construction of the breakwater. There is an active nesting colony of Great Blue Herons within 0.25 miles of the project site, and the Department of Natural Resources (DNR) has requested a time of year restriction for construction activities from February 15<sup>th</sup> through July 31<sup>st</sup>.

A Stormwater and Sediment and Erosion Control approval has been issued by the Maryland Department of the Environment (MDE). Approval from the Board of Public Works is pending, and will be included as a condition of Commission approval. Since the project involves actions on privately owned land, a consistency report from the Talbot County Office of Planning and Zoning is required. This will also be included as a condition of Commission approval.

#### Staff Recommendations:

The Commission staff recommend that this project be approved with the following conditions:

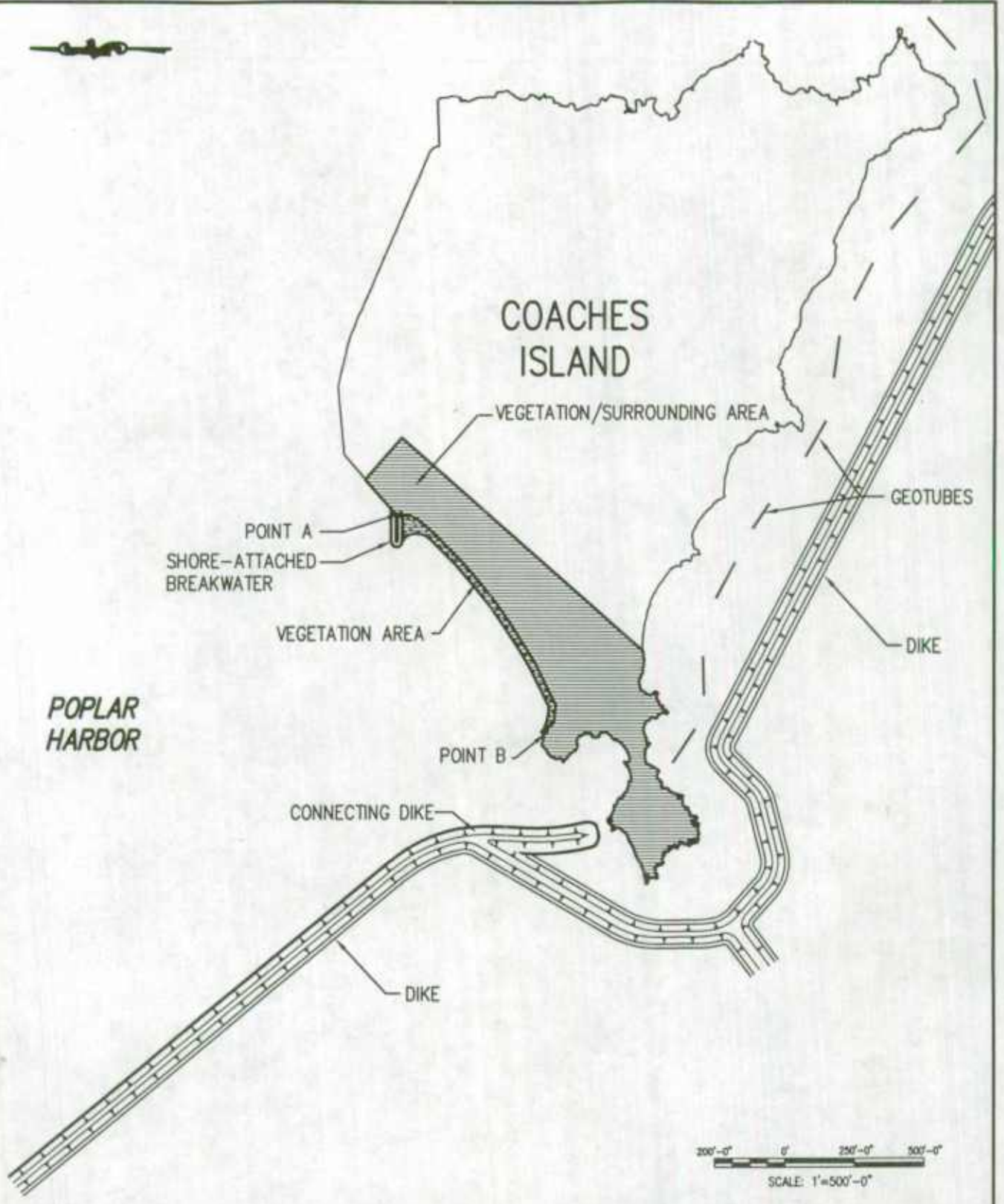
1. The MPA obtain approval from the Board of Public Works prior to beginning construction.
2. The MPA obtain a consistency report from the Talbot County Department of Planning and Zoning stating that the project is consistent with the local Critical Area Program, prior to beginning construction.
3. Any disturbance to the Buffer shall be mitigated at a 1:1 ratio. Disturbance includes grading and clearing.
4. The project shall comply with the February 15<sup>th</sup> through July 31<sup>st</sup> time of year restriction for the nesting colony of Great Blue Herons.







EXHIBIT - A



DWG. INFO. P:\1759\_8\_COACHES ISLAND\CA00\SUBMITTAL\2003-04\_SUGGESTED\2003\03\01-ADWG.MAR 19 2004 - 10:32 AM. P:\FORNER. (C) MOFFATT AND NICHOL



MARYLAND PORT ADMINISTRATION



**MOFFATT & NICHOL**  
ENGINEERS  
BALTIMORE, MARYLAND

MARCH, 2004

**COACHES ISLAND  
RESTORATION PROJECT PLAN**

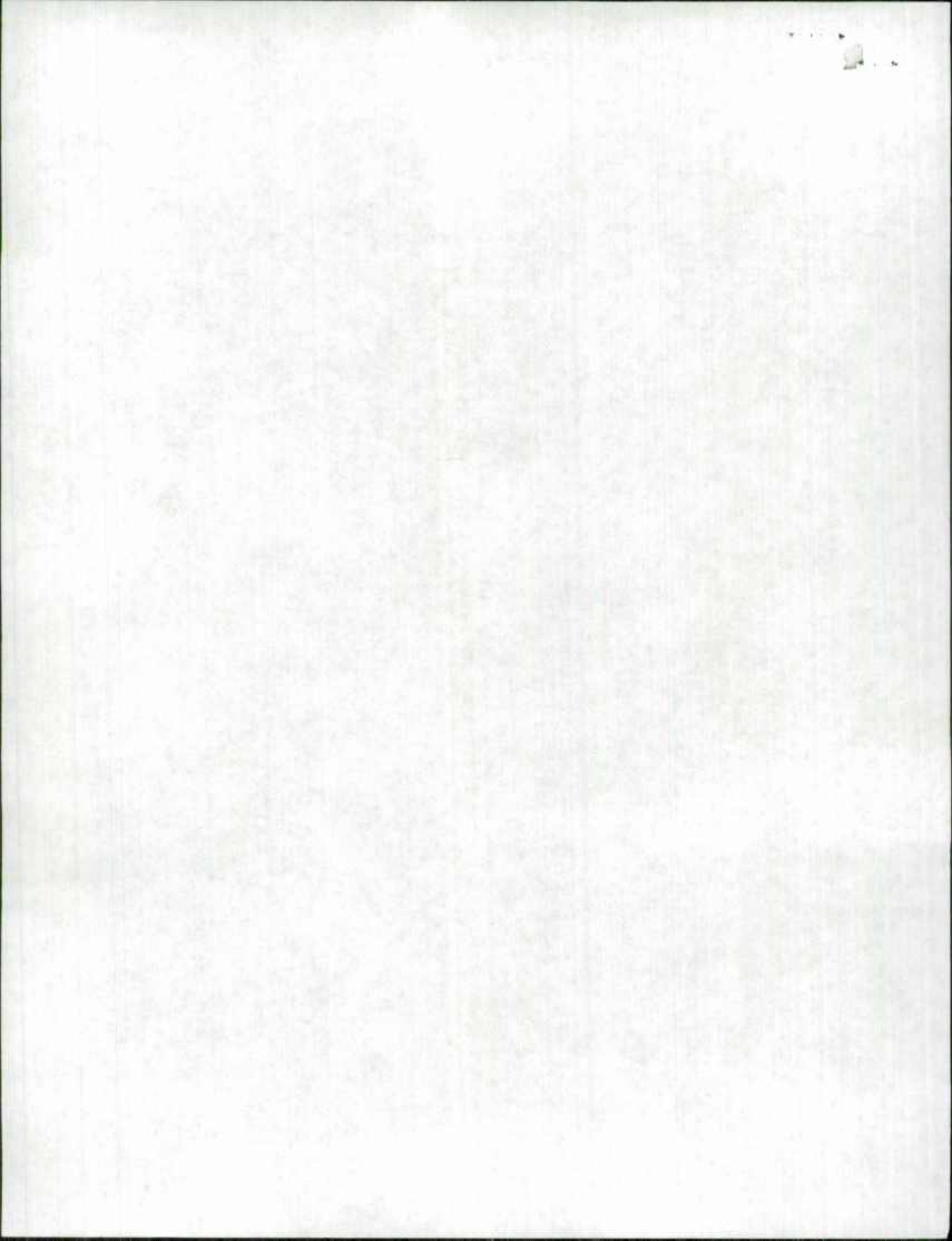


Coaches Island Looking South / Southwest



↑  
Shoreline  
Stabilization  
Area

Poplar Island ↑





## *Critical Area Commission*

### STAFF REPORT September 1, 2004

**APPLICANT:** Department of Natural Resources

**PROPOSAL:** Proposed Canoe Launch at Deer Creek  
Susquehanna State Park

**JURISDICTION:** Harford County

**COMMISSION ACTION:** Vote

**STAFF RECOMMENDATION:** Approval with Condition

**STAFF:** Dawnn McCleary

**APPLICABLE LAW/  
REGULATIONS:** COMAR 27.02.05 - State Agency Actions Resulting in  
Development on State-Owned Lands

#### **DISCUSSION:**

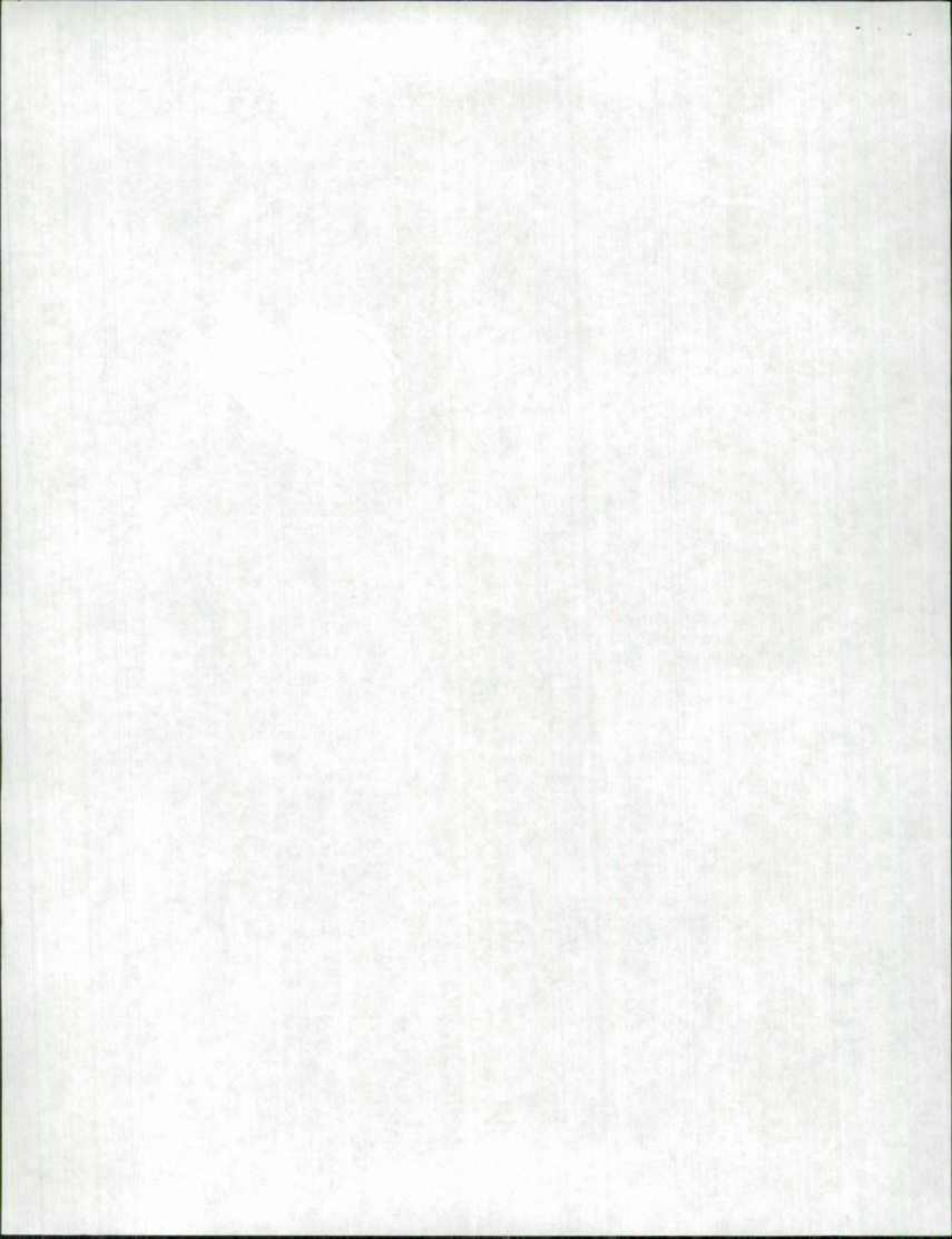
The Maryland Department of Natural Resources is proposing to construct a canoe launch\takeout along Deer Creek, immediately upstream of the Susquehanna River. The total area of disturbance is 2,890 square feet, with 1,425 square feet of impervious surface being created. The construction of the launch is intended to provide improved access to Deer Creek in an area that is heavily used by canoers and tubers. The launch will also stabilize existing erosion at the site and provide safer access for recreational users.

The proposed project will include the construction of a 30 feet long by 8 feet wide gravel canoe ramp, timber steps to the top of the stream bank and a stabilized 6-foot wide access trail in the 100-foot Buffer. Buffer impacts total 2,225 square feet with 1,040 square feet of impervious surface being created. The access trail will provide a connection between the ramp and an existing gravel parking area that is located adjacent to the site. The site will also have a stone lined drainage channel in order to correct the existing erosion problem and to prevent undermining of the proposed trail. No impacts to any other Habitat Protection Areas will occur.

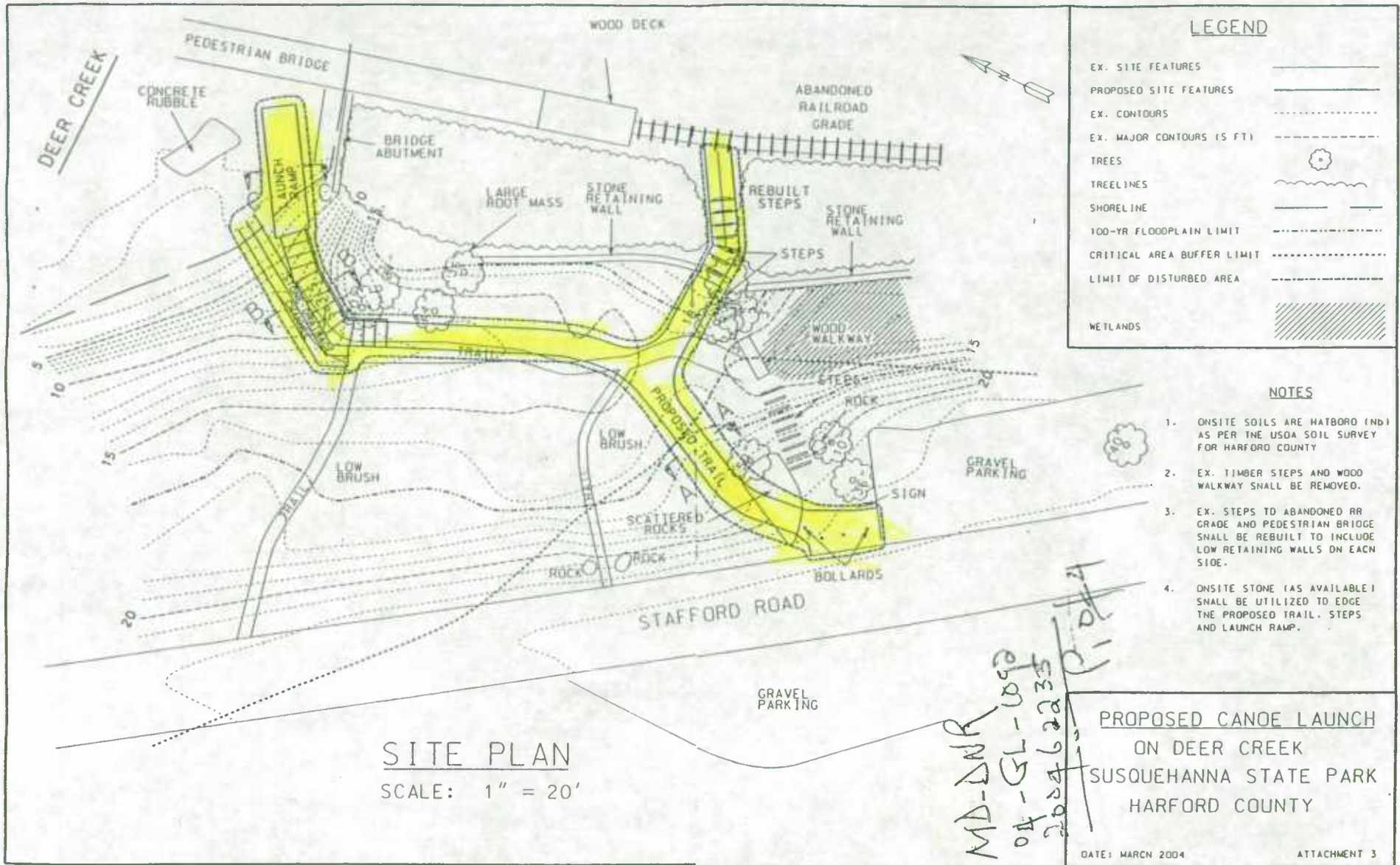
The proposed project will require the removal of trees; however, clearing activities will be confined to the removal of low brush. Mitigation at a 2:1 ratio is proposed for impacts to the 100-foot Buffer. DNR is currently looking for mitigation locations on-site.

#### *Condition:*

DNR shall determine a mitigation location within 60 days and coordinate with Commission staff on an appropriate planting plan.







**LEGEND**

EX. SITE FEATURES	_____
PROPOSED SITE FEATURES	_____
EX. CONTOURS	-----
EX. MAJOR CONTOURS (5 FT)	-----
TREES	⊙
TREELINES	~~~~~
SHORELINE	_____
100-YR FLOODPLAIN LIMIT	-----
CRITICAL AREA BUFFER LIMIT	-----
LIMIT OF DISTURBED AREA	-----
WETLANDS	▨

**NOTES**

1. ONSITE SOILS ARE HATBORD (Nd) AS PER THE USOA SOIL SURVEY FOR HARFORD COUNTY
2. EX. TIMBER STEPS AND WOOD WALKWAY SHALL BE REMOVED.
3. EX. STEPS TO ABANDONED RR GRADE AND PEDESTRIAN BRIDGE SHALL BE REBUILT TO INCLUDE LOW RETAINING WALLS ON EACH SIDE.
4. ONSITE STONE (AS AVAILABLE) SHALL BE UTILIZED TO EDGE THE PROPOSED TRAIL, STEPS AND LAUNCH RAMP.

**SITE PLAN**  
SCALE: 1" = 20'

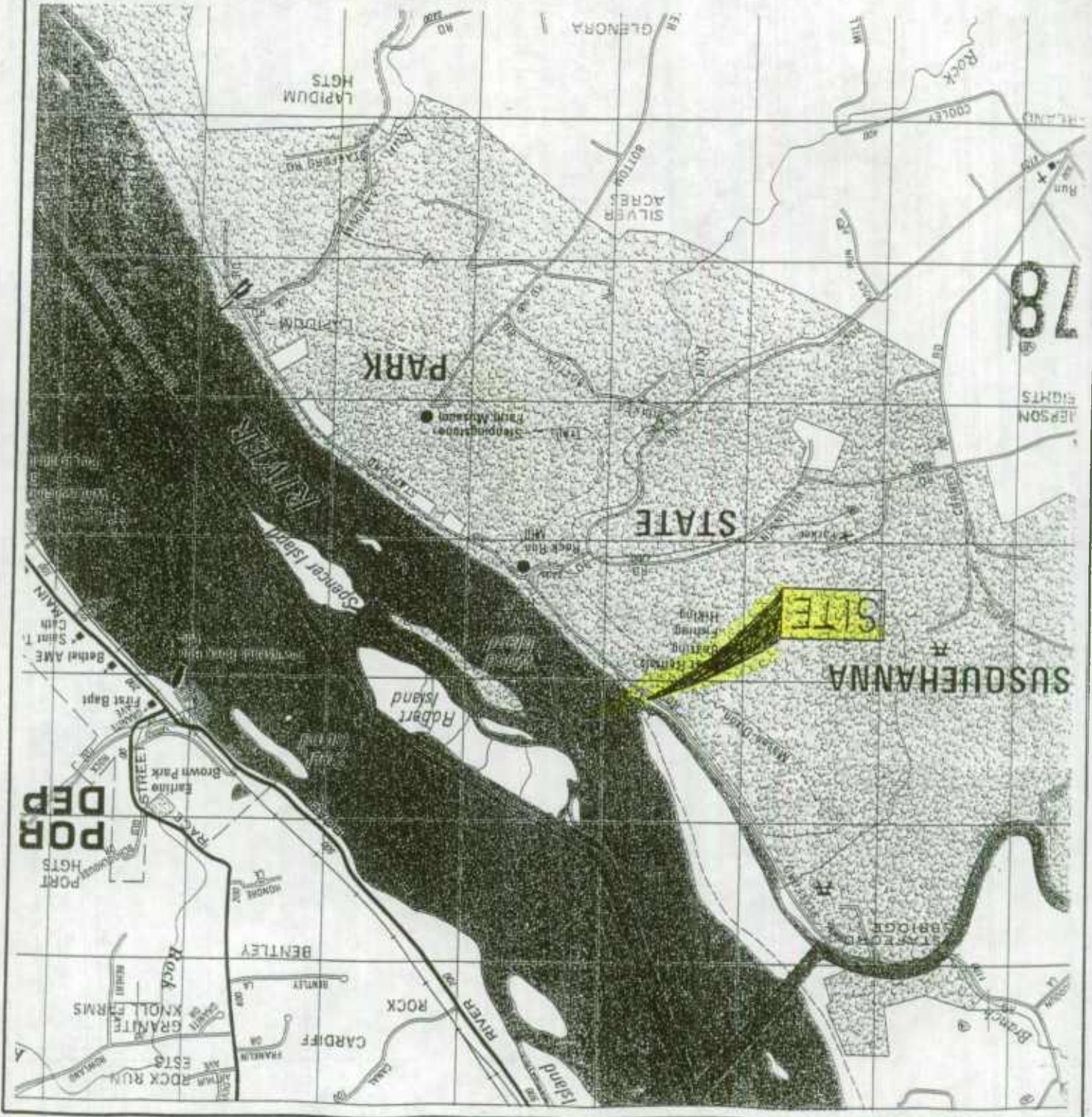
**PROPOSED CANOE LAUNCH**  
ON DEER CREEK  
SUSQUEHANNA STATE PARK  
HARFORD COUNTY

MD-DNR  
04-GL-099  
200462235  
P. 07



PROPOSED CANOE LAUNCH  
ON DEER CREEK  
SUSQUEHANNA STATE PARK  
HARFORD COUNTY

LOCATION MAP  
SCALE: 1" = 2000'





## *Critical Area Commission*

### **STAFF REPORT September 1, 2004**

**APPLICANT:** Department of Natural Resources/Erickson Foundation

**PROPOSAL:** North Bay Environmental Education Camp

**JURISDICTION:** Cecil County

**COMMISSION ACTION:** Vote

**RECOMMENDATION:** Approval

**STAFF:** Regina Esslinger

**APPLICABLE LAW/  
REGULATIONS:** COMAR 27.02.05 State Agency Actions Resulting in Development on State-Owned Land

#### **DISCUSSION:**

At the Commission's April 7, 2004 meeting, the Commission granted final conditional approval for the North Bay Environmental Education Camp, a camp for children at Elk Neck State Park built in partnership with the Department of Natural Resources and the Erickson Foundation. The camp will serve public and private schools, religious groups, Boys Scouts, Cub Scouts, Girl Scouts, Young Life, and athletic associations. The camp will have up to 500 people between campers and staff. The Erickson Foundation, with input from and in coordination with DNR, is developing a program that will provide experience and training in environmental awareness, natural resources conservation, team and confidence building, and leadership training.

Last month the Commission approved the consolidation of three staff housing buildings into one building, the elimination of two supervisors' houses, and minor reconfiguration of some parking spaces. The overall site plans have been further refined, and the plans now show a classrooms building that was shown on the July 2, 2003 plans and removed from the April 7, 2004 plans. The location is approximately the same as in the original plans and is not in the expanded Buffer or on steep slopes. As adjusted under last month's approval, impervious surface on the site was to be 12.8%. At the time of this mailing, I do not have the revised impervious surface percentage for the site. The building and deck will have a combined footprint of 3082 square feet. No additional clearing is necessary, and I am awaiting confirmation that no changes are needed to the MDE permits.

The Commission approved the conditional approval on July 3, 2003 with the following conditions:

1. There shall be 17.00 acres of mitigation for impacts to steep slopes and Buffer provided on the lease site and on DNR land adjacent to the site.
2. There shall be no additional buildings with impacts to steep slopes and Buffer.
3. There shall be no runoff from any impervious areas allowed to flow over any slope greater than 15% on the northern side of the camp.
4. The approval of all stormwater management plans shall be concurrent with MDE approval.

The Commission determined on April 7, 2004 that these conditions had been met with the final design. The proposed changes do not adversely affect the fulfillment of these conditions.



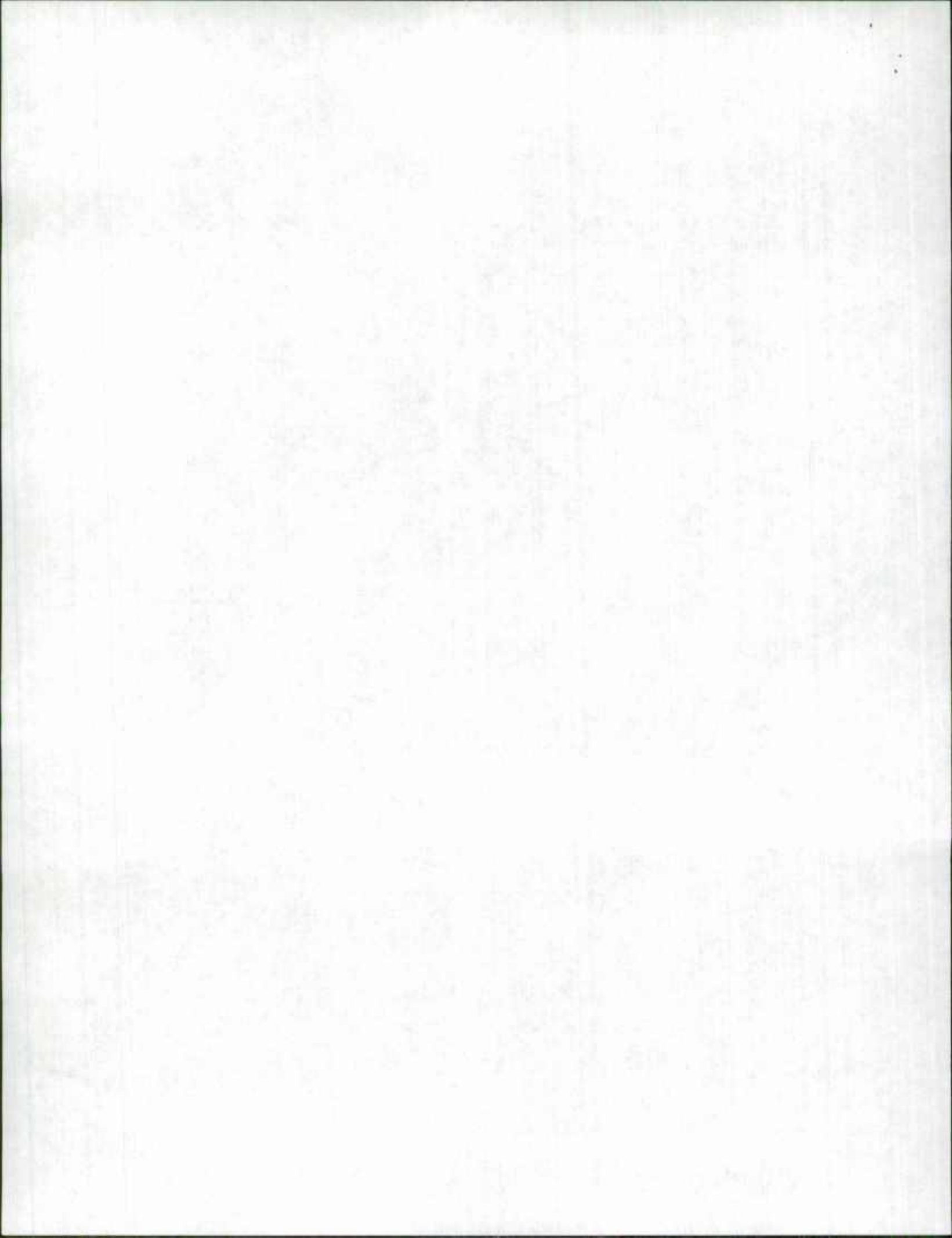
**NORTH BAY IMPACTS AND REQUIRED MITIGATION**  
**September 1, 2004**

**Buffer impacts and required mitigation – no changes from April 7, 2004 approval**  
(includes temporary and permanent disturbance)

	100-foot Buffer	Exp. Buffer for slopes	Exp. Buffer for NTW	Ratio	Total
Water dependent facilities	2415 sq. ft.	0	0	1	2415 (0.06 ac)
Water access	6304 sq. ft.	3102 sq. ft.	1050 sq. ft.	2	20912 (0.48 ac)
Trails at 30% clearing	2505 sq. ft.	12523.5 sq. ft.	0	3	45085.5 (1.04 ac)
Other impacts (buildings, roads, grading)	11635 sq. ft.	144100 sq. ft.	346 sq. ft.	3	468243 (10.7 ac)
Offsite utilities	31600 sq. ft.	4000 sq. ft.	0	3	106800 (2.45 ac)
Total Buffer mitigation owed					643455.5 (14.77 ac)

**Proposed steep slopes impacts and required mitigation – reduced from 4/7/04 approval**  
(includes temporary and permanent disturbance)

	Steep slopes	Ratio	Total
Main site	73460 sq. ft.	1	73460 (1.68 ac)
On-site utilities	6550 sq. ft.	1	6550 (0.15 ac)
Offsite utilities	2000 sq. ft.	1	2000 (0.04 ac)
			82010 (1.88 ac)



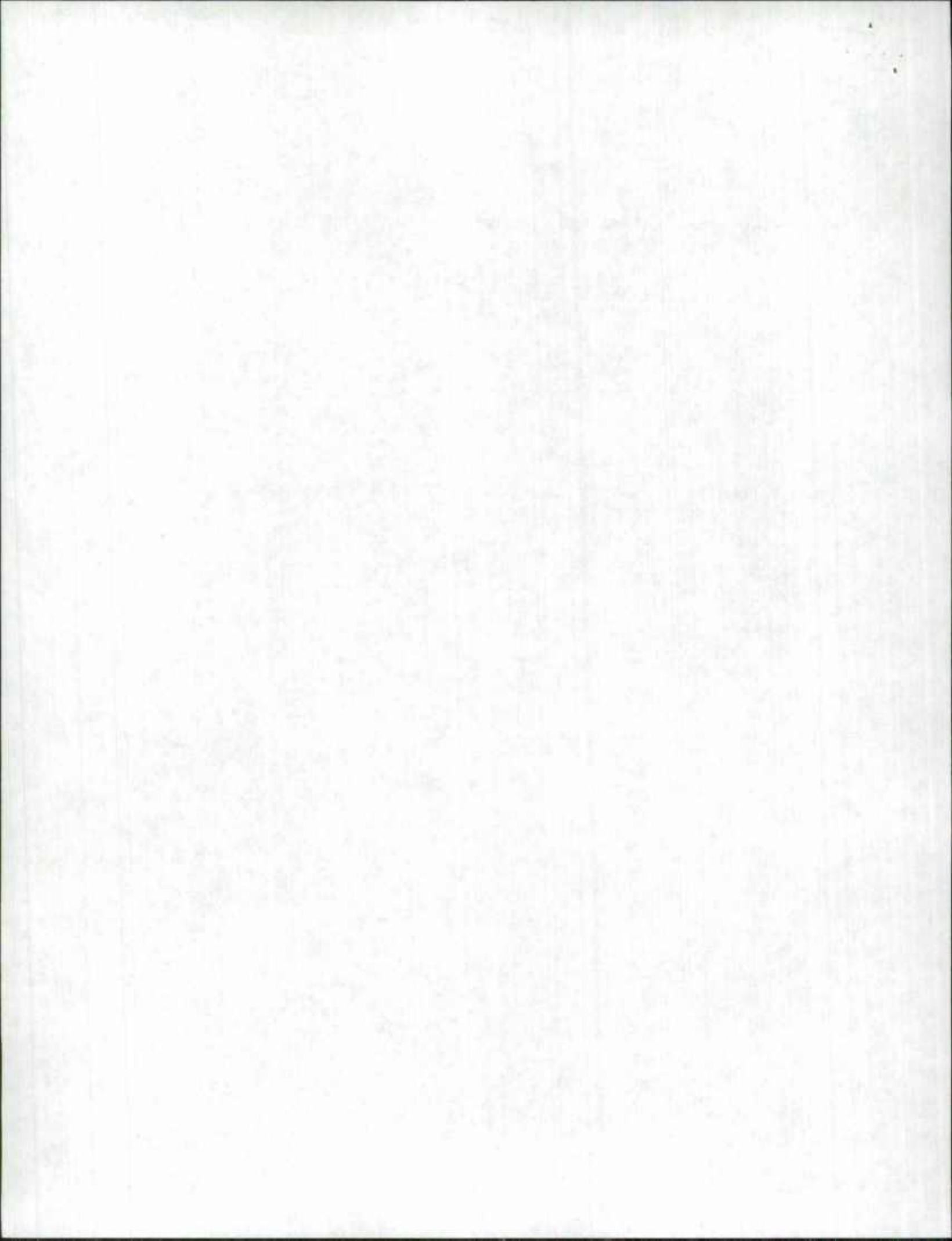


**Steep slopes impacts and required mitigation as of April 7, 2004 approval**  
 (includes temporary and permanent disturbance)

	Steep slopes	Ratio	Total
Main site	74490 sq. ft	1	74490 (1.71 ac)
On-site utilities	6550 sq. ft.	1	6550 (0.15 ac)
Offsite utilities	2000 sq. ft.	1	2000 (0.04 ac)
			83040 (1.9 ac)

**Steep slopes impacts and required mitigation as of July 2, 2003 approval**  
 (includes temporary and permanent disturbance)

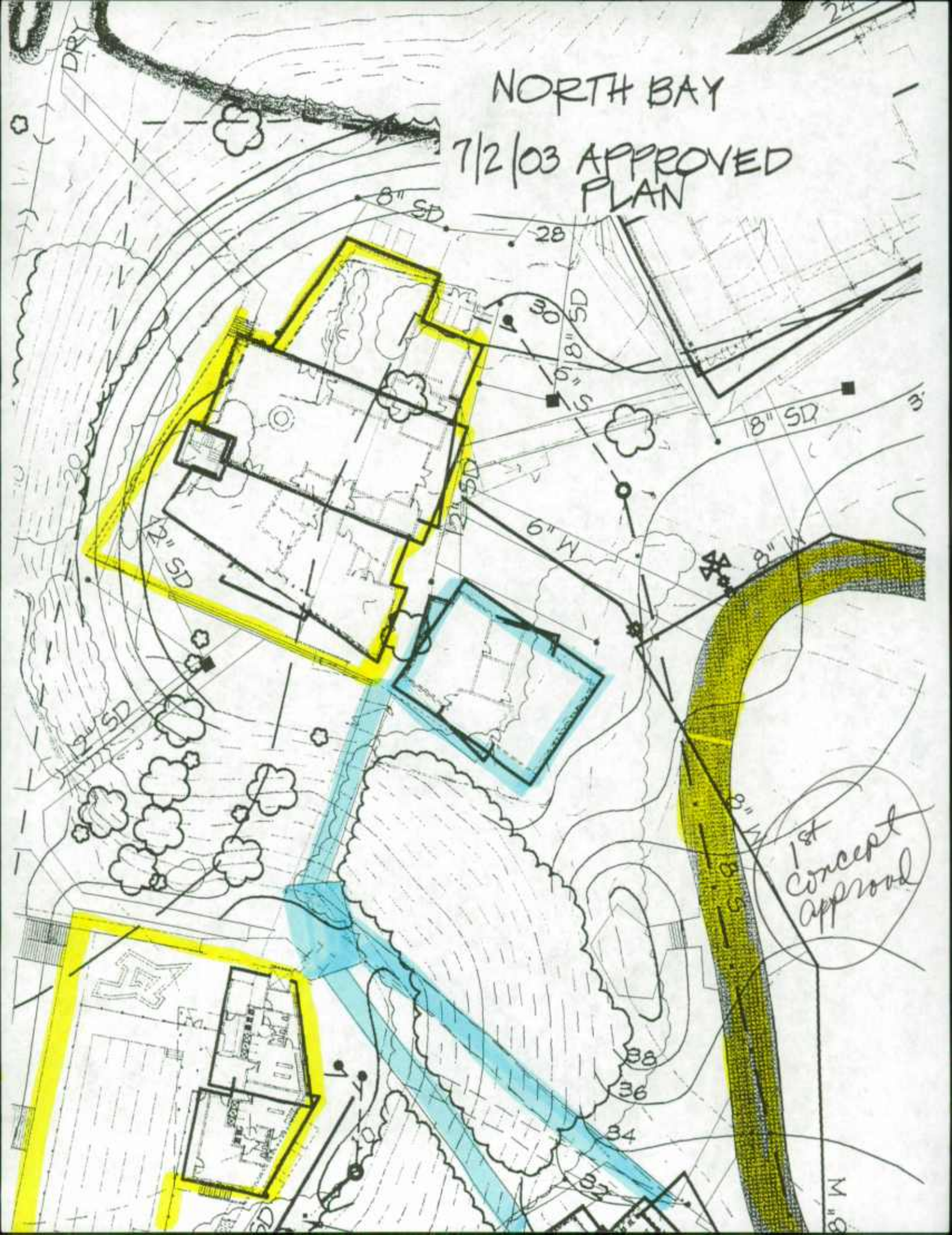
	Steep slopes	Ratio	Total
Main site	80806 sq. ft	1	80806 (1.86 ac)
On-site utilities	0	1	0
Offsite utilities	2000 sq. ft.	1	2000 (0.04 ac)
			82806 (1.9 ac)



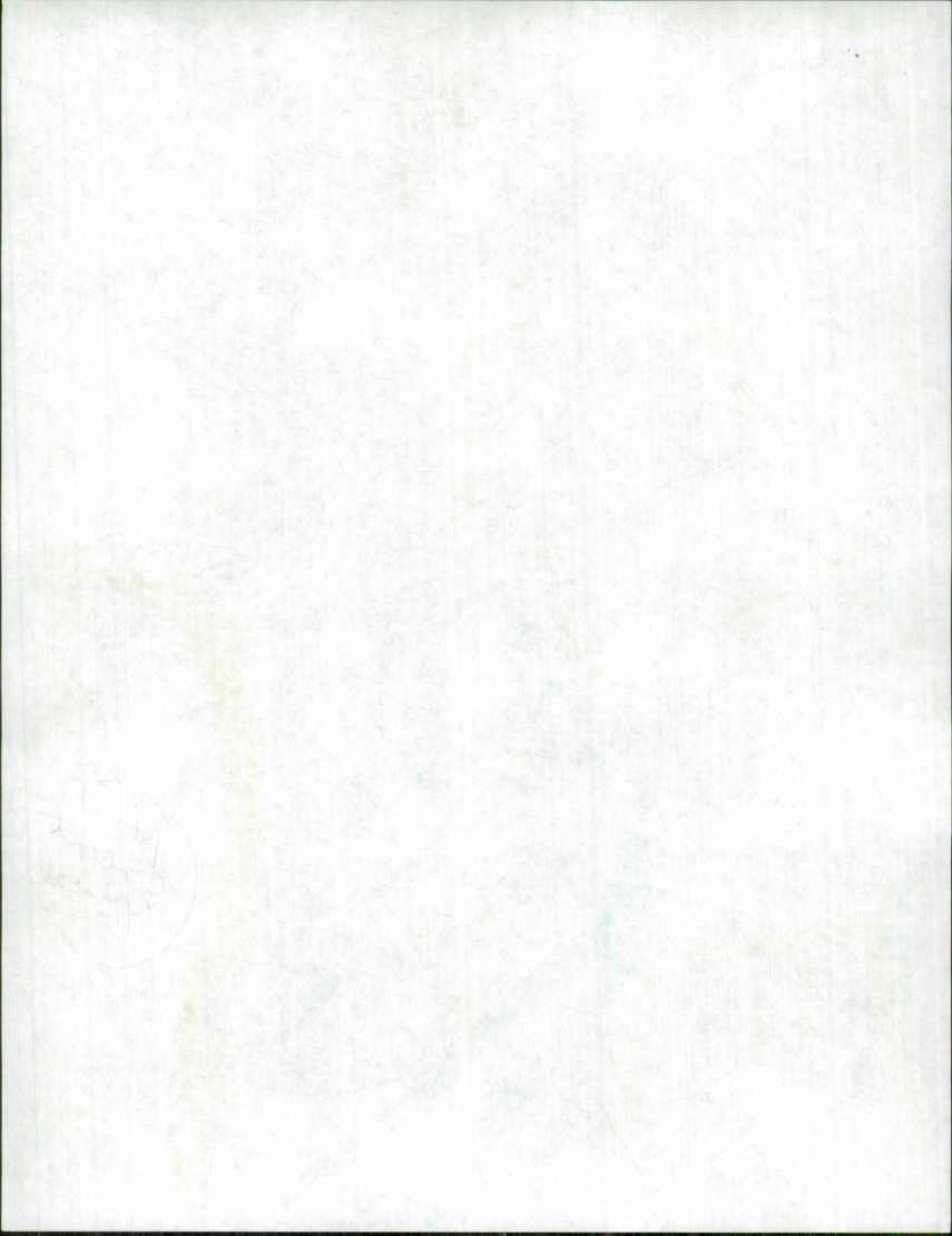


# NORTH BAY

7/2/03 APPROVED  
PLAN

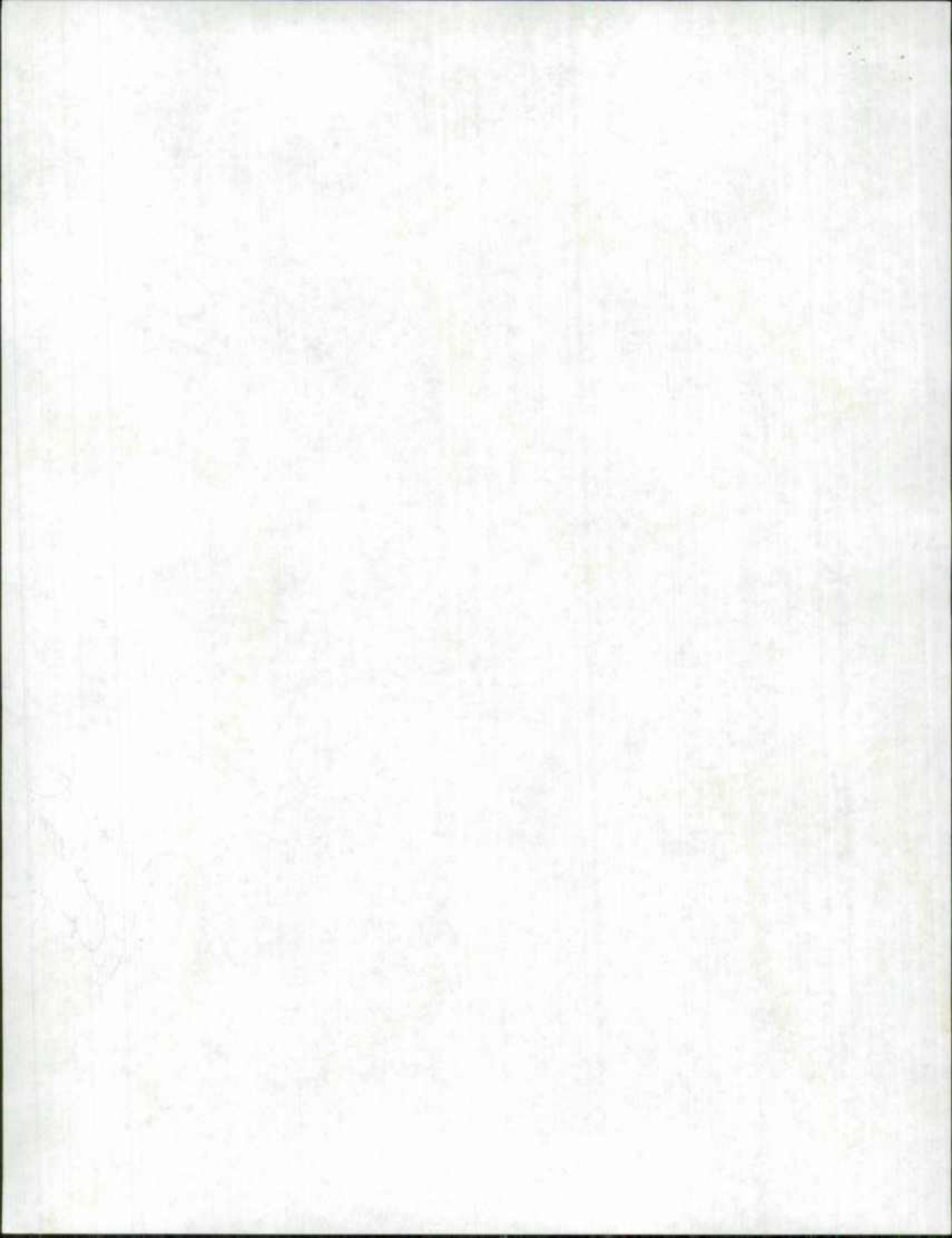


















Bob Brigham

18 cabins under roof to be  
Sept 1, 2005 completed.

Gary - app. pro. refinements —

1,690 ft sq St. bldg.  
deck.

3. <sup>in</sup> imp. surface

Elim. portion of Bldg.  
outside Bldg. —

return in. surf.

Wilson - sec. @/u



Get primary map

## Critical Area Commission

STAFF REPORT  
September 1, 2004

**APPLICANT:** Queen Anne's County/K. Hovnanian

**PROPOSAL:** Buffer Management Plan for Four Seasons At Kent Island

**COMMISSION ACTION:** Vote

**STAFF RECOMMENDATION:** Approval *Regina -*

**STAFF:** LeeAnne Chandler *on vacation*

**APPLICABLE LAW/  
REGULATIONS:** COMAR 27.01.02.06 – Location and Extent of Future Intensely Developed and Limited Development Areas

### DISCUSSION:

In December 2000, the Critical Area Commission approved a Queen Anne's County request to grant growth allocation to a project known as Four Seasons at Kent Island. There were ten conditions of approval, including one that stated, "Prior to recordation of any subdivision plats or final approval of any site plans, building permits or grading permits, a Buffer Management Plan for the entire Buffer and/or setback area of the project shall be reviewed and approved by the full Critical Area Commission." Below, please find a background summary of the project, followed by a description of the Buffer Management Plan.

### Background

The project is located on the north side of Route 50 on Kent Island in Queen Anne's County. It is located in the Stevensville and Chester Growth Areas on portions of the Chester River, Macum Creek and both sides of Cox Creek. The properties involved total approximately 511 acres, with approximately 454 acres within the Critical Area. There is a large tidal pond with associated wetlands along the Chester River portion of the site, and linear wetlands along both sides of Cox Creek and adjacent to Macum Creek. There are three forested areas on the site, totaling approximately 55 acres with the balance of the property in agricultural use. There is an existing farmhouse and outbuildings, a mausoleum and an airstrip on the site. There are also two dredge material disposal areas on the property. The request for growth allocation utilized 293.25 acres of growth allocation to convert RCA to IDA and to redesignate 79.55 acres of previously awarded growth allocation from LDA to IDA. Approximately 81 acres remain as RCA.

The development includes a total of 1,350 age-restricted units made up of 930 single-family

homes and 420 multi-family dwelling units. It also includes a 35,000 square foot community center, an 80-bed assisted living facility (to be built by others), a community pier and a 6.5-acre County park along Macum Creek. Also, as required by the conditions of approval, there will be 300-foot setbacks along Macum Creek and Cox Creek, a 150-foot setback around the tidal pond and a 100-foot Buffer from the landward edge of the shore erosion structure along the Chester River. As a project in the IDA, the project must also address the 10% pollutant reduction requirement.

### **Buffer Management Plan**

The project will be developed in five phases over 12 years. The Four Seasons site contains approximately 5 miles of shoreline. Existing conditions of the setback areas have been assessed on a phase-by-phase basis. Many of the areas have been left out of agricultural production the past few years and natural regeneration has begun in some locations. The existing conditions were used in dividing the Buffers into three "management units."

1. The "**forested management unit**" represents portions of the site containing mature trees. The applicant will control invasive and exotic species where needed but no planting will be required in these areas.
2. The "**natural regeneration management unit**" represents those areas where natural regeneration has begun and appears viable. Management measures will include control of invasive or exotic species and monitoring to ensure the areas are progressing to an early successional forest.
3. The "**planted management units**" are those areas that will be planted in accordance with specific landscape schedules prepared for each phase. A biannual inspection will occur and will include a count of the number of thriving plants per acre. Planted materials will be maintained through control of competing vegetation, maintenance of tree shelters and watering as necessary.

All areas will be considered "fully forested" when 440 woody stems per acre are established.

Phase 1 – This phase includes construction of 106 single-family homes, 56 condominium units, a water tower, pump station, associated stormwater facilities and a non-tidal wetland mitigation project. It includes the 300-foot setback along Macum Creek (totaling 15.6 acres) and about 500 linear feet of the 300-foot setback along Cox Creek (3.4 acres). The Macum Creek setback includes all three management units. The existing forested fringe along the shoreline will remain and will serve as a seed source for natural regeneration on portions of Phase 1. The remaining area will be divided – approximately 5.3 acres will be left to naturally regenerate while the other 5.5 acres will be cleared of existing vegetation and will be planted with native tree and shrub species. Invasive species will be controlled in all areas through appropriate means. The 3.4-acre area along Cox Creek will be used to create a non-tidal wetland serving as mitigation for the project's non-tidal and tidal wetland impacts as well as a means to increase the floodplain capacity. It will be re-graded and vegetated with non-tidal and upland native species.

Phase 2 – This phase includes construction of an additional 238 residential units, the main entrance road and the clubhouse facilities. Approximately 5,000 linear feet of shoreline along



CAC. Four Seasons - BMP

9/1/04

Condition 1

The area shown as warm season grasses between points x and y on Exhibit 1, which is Plate 3a of the Buffer Management Plan, will instead be planted as a Typical Forested Planting Unit as shown on Exhibit 2, which is Plate 3b of the Buffer Management Plan. Exhibits 1 and 2 are incorporated herein.

Exhibit 1 is modified to show reduction in the path system.

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2023-2024  
2024-2025



Region discussed  
(various) phases

Cox Creek and 1,840 linear feet of shoreline along the Chester River will be addressed in Phase 2. The 300-foot setback along Cox Creek will be split into two management units. Approximately 14 acres are already forested while the remaining 18.5 will be managed as natural regeneration. The setback area along the Chester River included in Phase 2 includes the two existing dredge disposal areas on the site. The areas are dominated by *Phragmites* and appear as sandy dunes and low drainage basins. Grading is proposed in these areas to create more natural topography and a viable planting surface. The area waterward of the proposed clubhouse will be planted with a wildflower/grass mix along with a "Bayscape" shrub mix. This area extends 360 linear feet and is approximately 0.3 acres in size. It will be the primary point of access to the shoreline for the community. It represents a very small percentage of the project's 125-acres of Buffer establishment. The remaining area in Phase 2 will be planted with native trees and shrubs to create a multi-layered forest.

revised  
← ?

Phase 3 – This phase includes the 100-foot Buffer from the landward edge of the shore erosion control structure along the Chester River as well as the 150-foot setback from the edge of non-tidal wetlands around the tidal pond. It comprises 20.4 acres. Much of the area is overrun with *Phragmites*. The first step in this phase will be intensive *Phragmites* eradication through the application of approved herbicides followed by cutting. The upland areas will be planted with native trees and shrubs while the non-tidal and tidal wetland portions will be planted with wetland vegetation.

Phase 4 – This phase includes the 300-foot setback along 1200 feet of Cox Creek and the 100-foot Buffer along 700 linear feet of the Chester River. The Cox Creek setback has begun to naturally regenerate, although some areas have been invaded by *Phragmites*. The Chester River setback contains some mature forest. Both of these areas will be left to continue regenerating but will be monitored for invasive species. Invasive species will be controlled by appropriate means.

Phase 5 – This phase includes the 300-foot setback along the western bank of Cox Creek. The area has been left fallow for the past few years and some limited natural regeneration is occurring. The area will be left to continue regenerating but will be monitored for invasive species. Invasives will be controlled by appropriate means to encourage the growth of desirable woody species.

All Buffer and setback areas will be placed under a restrictive covenant recorded in the land records of Queen Anne's County. The applicant is proposing inspections of both the natural regeneration sites and the planted areas on a biannual basis with reports sent to County and Commission staff every May and October. Inspections and reporting will begin for a five year period once planting of an area is completed. If natural regeneration is proposed, an assessment of the area will be provided when each phase is submitted for final subdivision review. The need for supplemental planting or further monitoring will be determined at that time.

Revised Buffer Planting Plan Phase 5  
Upper Portion of Site + in front of Clubhouse

5 YR. Monitoring Plan

Concern for a "fully forested buffer"  
in front of clubhouse —

revised in Cuded more landscape plants  
less herbaceous

established as part of approval

Another concern in front of clubhouse  
was pathways so extensive &  
expensive  
to remove "loop" path

---

Gary Appr BMP for 4-5 at KI  
following

Conditions: (Read)

1)

Gary

Joe Jackson - Sec. U/C



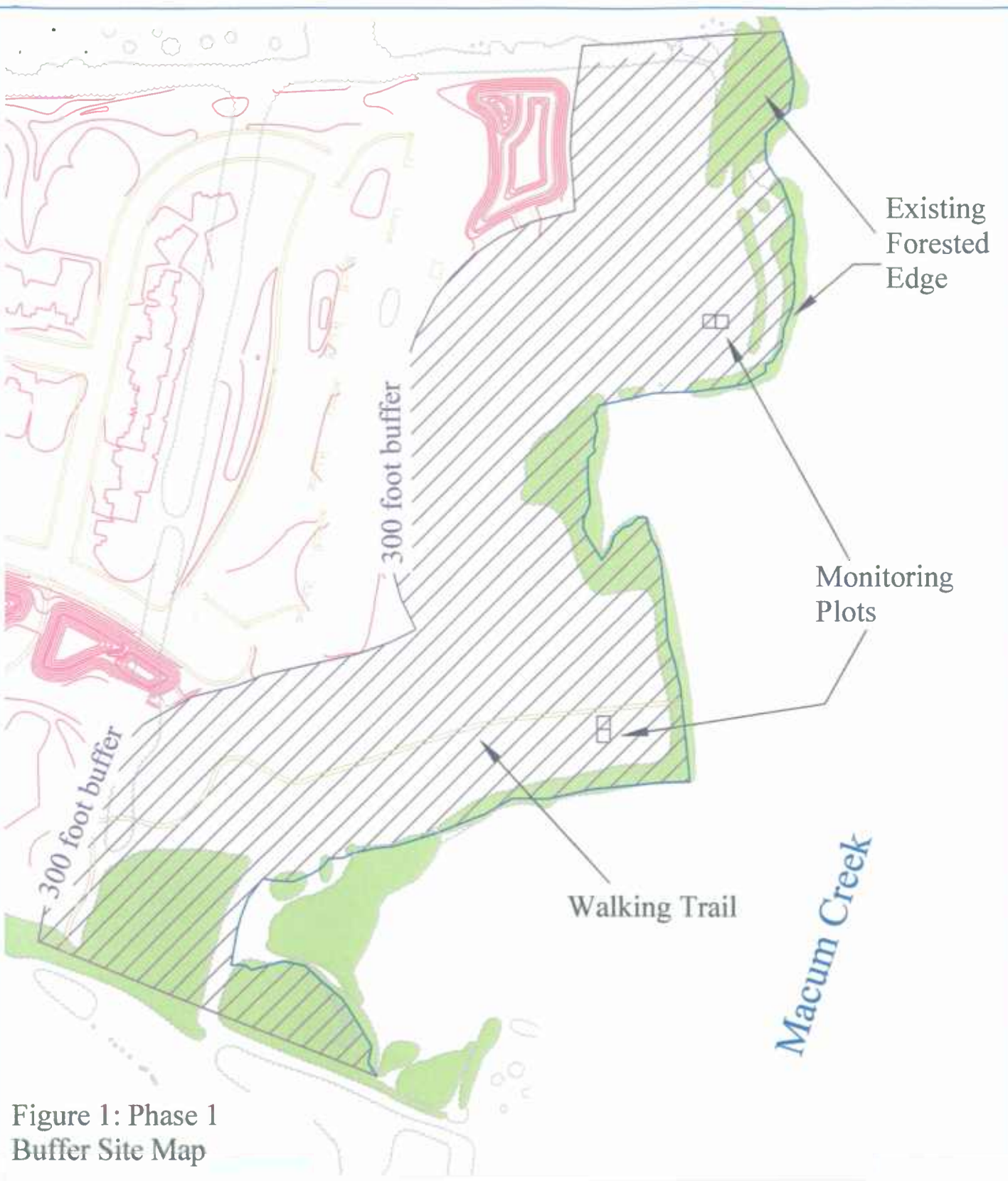


Figure 1: Phase 1 Buffer Site Map

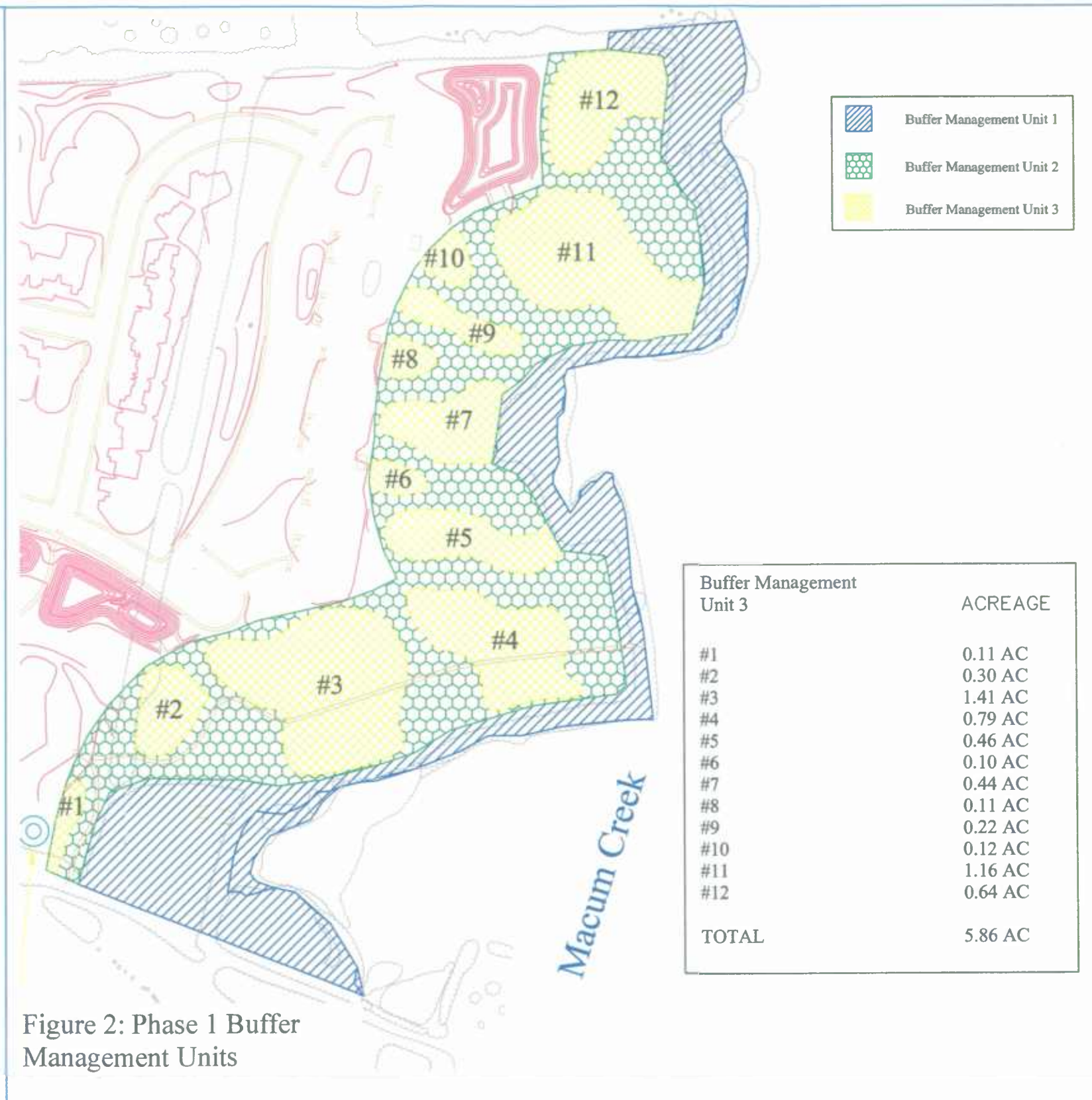


Figure 2: Phase 1 Buffer Management Units

PLATE 2  
Phase 1 - Buffer Management Areas

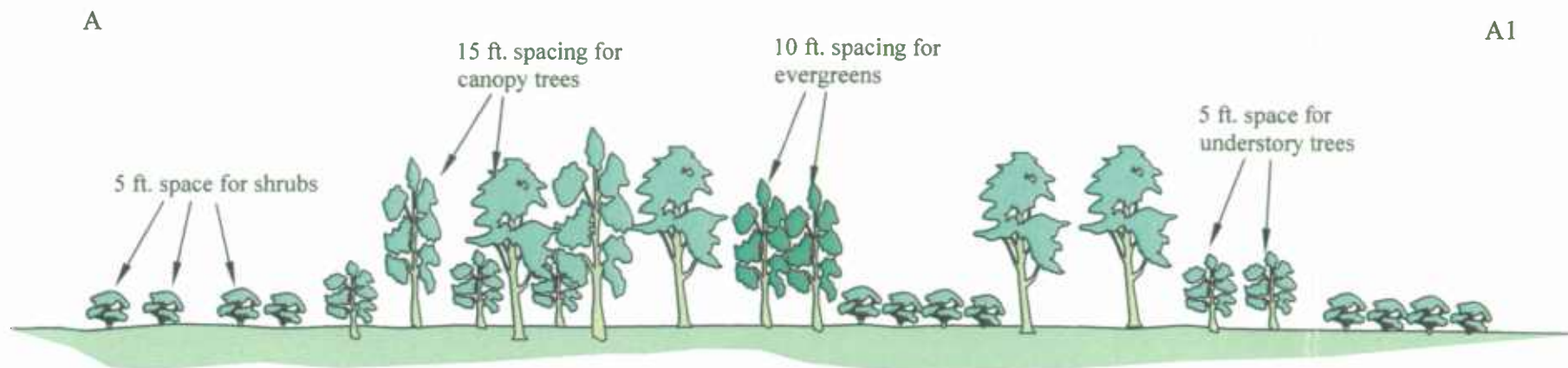
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Four Seasons  
 Kent Island, MD

June 2004  
 Scale: 1" = 200'





Cross Section for Typical Buffer Planting



Typical Planting Area

FOUR SEASONS AT KENT ISLAND  
LD# 2002139 06/06/04

### Species List and Quantities

Botanical Name	Common Name	Quantity
<b>Canopy Trees</b>		
<i>Acer rubrum</i>	Red Maple	15
<i>Betula nigra</i>	River Birch	40
<i>Carya Cordiformis</i>	Bitternut Hickory	30
<i>Nyssa sylvatica</i>	Black Gum	50
<i>Pinus taeda</i> *	Loblolly Pine	20
<i>Pinus strobus</i> *	White Pine	20
<i>Pinus virginiana</i> *	Virginia Pine	20
<i>Quercus marilandica</i>	Black Jack Oak	50
<i>Quercus stellata</i>	Post Oak	50
<i>Quercus phellos</i>	Willow Oak	120
<i>Quercus rubra</i>	Red Oak	120
<b>Total Canopy</b>		<b>535</b>
<b>Understory Trees (small &amp; medium trees)</b>		
<i>Ilex opaca</i> *	American Holly	175
<i>Sassafras albidum</i>	Sassafras	200
<i>Amelanchier canadensis</i>	Serviceberry	175
<i>Cercis canadensis</i>	Eastern Redbud	150
<i>Coruns florida</i>	Flowering Dogwood	200
<i>Chionanthus virginicus</i>	White Fringetree	150
<b>Total Understory</b>		<b>1,050</b>
<b>Shrubs</b>		
<i>Aronia arbutifolia</i>	Red Chokeberry	300
<i>Aronia melanocarpa</i>	Black Chokeberry	300
<i>Rubus allegheniensis</i>	Blackberry	200
<i>Vaccinium corymbosum</i>	Highbush Blueberry	300
<i>Viburnum dentatum</i>	Arrowwood Viburnum	300
<i>Myrica cerifera</i> *	Wax Myrtle	225
<i>Rhus copallina</i>	Shining Sumac	225
<i>Sambucus canadensis</i>	Elderberry	250
<b>Total Shrubs</b>		<b>2,100</b>
<b>Total</b>		<b>3,685</b>

\* Evergreen

## PLATE 2A Phase 1 - Buffer Management Plan

# LandDesign

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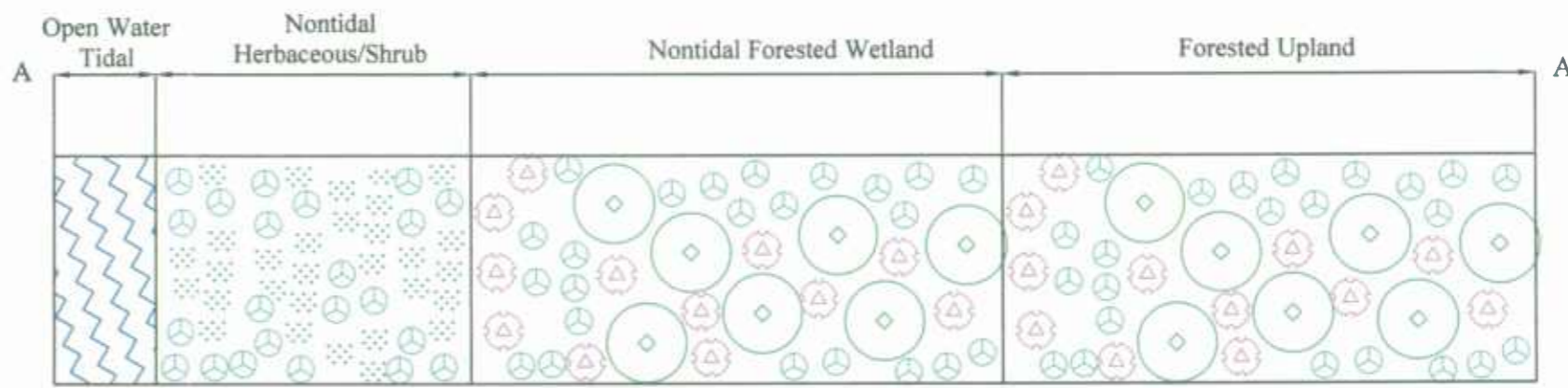
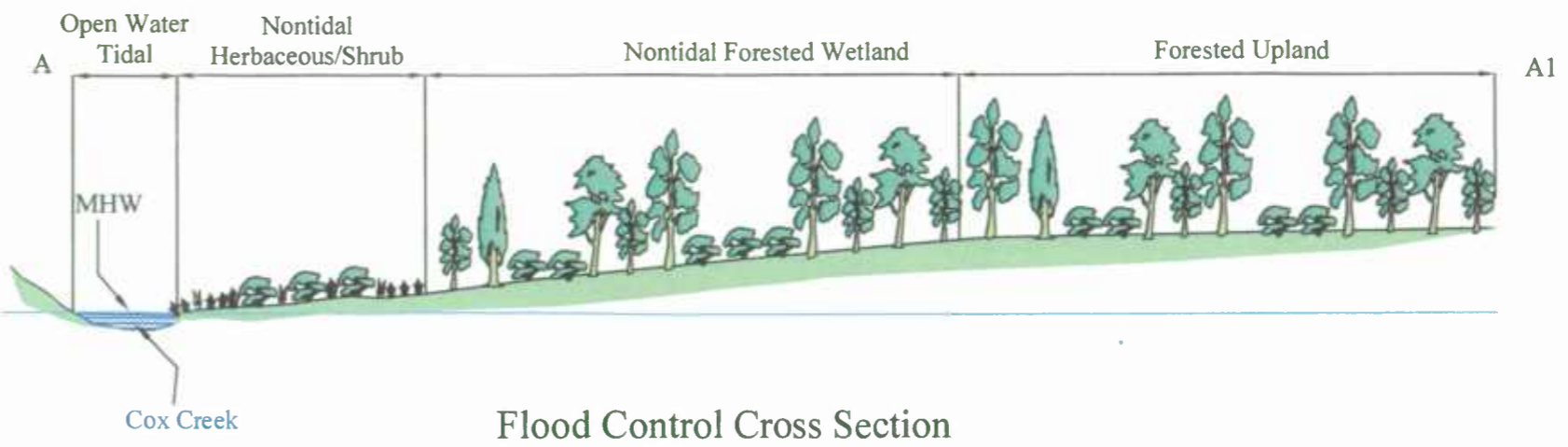


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St. Michaels, MD 21663

Four Seasons  
Kent Island, MD

rev. July 30, 2004  
not to scale





Forested Upland (1.99 acres)		
Botanical Name	Common Name	Quantity
<b>Canopy Trees</b>		
<i>Pinus taeda</i>	Loblolly Pine *	20
<i>Prunus serotina</i>	Black Cherry	15
<i>Carya cordiformis</i>	Bitternut Hickory	20
<i>Nyssa sylvatica</i>	Black Gum	15
<i>Quercus marilandica</i>	Black Jack Oak	20
<i>Quercus alba</i>	White Oak	15
<i>Quercus phellos</i>	Willow Oak	15
<i>Quercus rubra</i>	Red Oak	25
<i>Quercus stellata</i>	Post Oak	15
	total	160
<b>Understory Trees</b>		
<i>Cercis canadensis</i>	Eastern Redbud	55
<i>Coruns florida</i>	Flowering Dogwood	75
<i>Ilex opaca</i>	American Holly *	90
<i>Sassafras albidum</i>	Sassafras	93
	total	313
<b>Shrubs</b>		
<i>Aronia arbutifolia</i>	Red Chokeberry	85
<i>Myrica cerifera</i>	Wax Myrtle *	115
<i>Rubus allegheniensis</i>	Blackberry	70
<i>Vaccinium corymbosum</i>	Highbush Blueberry	125
<i>Viburnum dentatum</i>	Arrowwood viburnum	115
<i>Ilex verticillata</i>	Winterberry Holly	117
	total	627

Forested Wetland (.88 acres)		
Botanical Name	Common Name	Quantity
<b>Canopy Trees</b>		
<i>Acer rubrum</i>	Red Maple	10
<i>Betula nigra</i>	River Birch	10
<i>liquidambar straciflua</i>	Sweet Gum	10
<i>Nyssa sylvatica</i>	Black Gum	15
<i>Pinus taeda</i>	Loblolly Pine *	15
<i>Quercus palustris</i>	Pin Oak	20
	total	80
<b>Understory Trees</b>		
<i>Amelanchier canadensis</i>	Serviceberry	30
<i>Cornus Florida</i>	Flowering Dogwood	45
<i>Ilex americana</i>	American Holly	25
<i>Viburnum lentago</i>	Nannyberry Viburnum	28
	total	128
<b>Shrubs</b>		
<i>Aronia melanocarpa</i>	Black Chokeberry	35
<i>Cephalanthus occidenta</i>	Buttonbush	24
<i>Clethera alnifolia</i>	Sweet Pepperbush	30
<i>Ilex verticillata</i>	Winterberry Holly	30
<i>Sambucus canadensis</i>	Elderberry	50
<i>Vaccinium corymbosum</i>	Highbush Blueberry	75
<i>Viburnum dentatum</i>	Arrowwood viburnum	75
	total	319

Nontidal Wetland - Herbaceous/Shrub (.12 acres)		
Botanical Name	Common Name	Quantity
<b>Shrub</b>		
<i>Baccharis halimifolia</i>	Groundsel Tree	5
<i>Iva frutescens</i>	Marsh Elder	5
<i>Hibiscus moscheutos</i>	Rose Mallow	5
<i>Myrica pensylvanica</i>	Bayberry	5
	total	20
<b>Herbaceous</b>		
<i>Scirpus robustus</i>	Saltmeadow Bulrush	200
<i>Panicum virgatum</i>	Switchgrass	200
<i>Scirpus pungens</i>	Common Three-Square	250
<i>Solidago sempervirens</i>	Seaside Goldenrod	115
	total	765



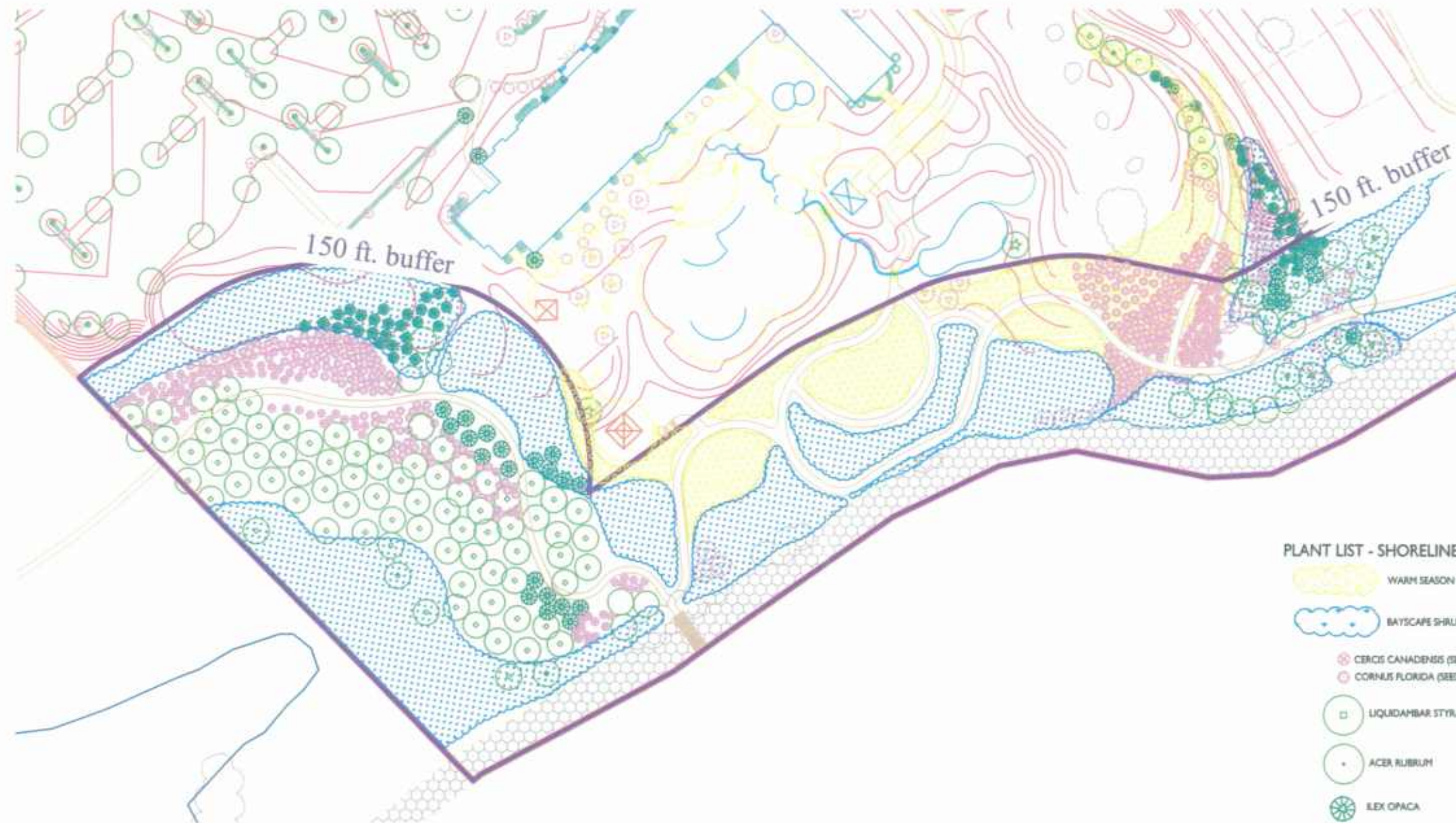
Flood Control Typical Planting Zones

PLATE 3  
Phase 1: Flood Control Planting Area

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Four Seasons  
Kent Island, MD  
rev. July 30, 2004  
not to scale





PLANT LIST - SHORELINE BUFFER

-  WARM SEASON GRASS MIX
-  BAYSCAPE SHRUB MIX
-  CERCIS CANADENSIS (SEEDLING, 4' O.C.)
-  CORNUS FLORIDA (SEEDLING, 4' O.C.)
-  LIQUIDAMBAR STRYACILLIA
-  ACER RUBRUM
-  ILEX OPACA
-  PINUS VIRGINIANA
-  BETULA NIGRA
-  AMELANCHIER CANADENSIS
-  JUNIPERIS VIRGINIANA
-  QUERCUS PHELLOS
-  FRAXINUS PENNSYLVANICA

PLATE 3a  
Phase 2 - Buffer Management Plan  
Chester River - Club House

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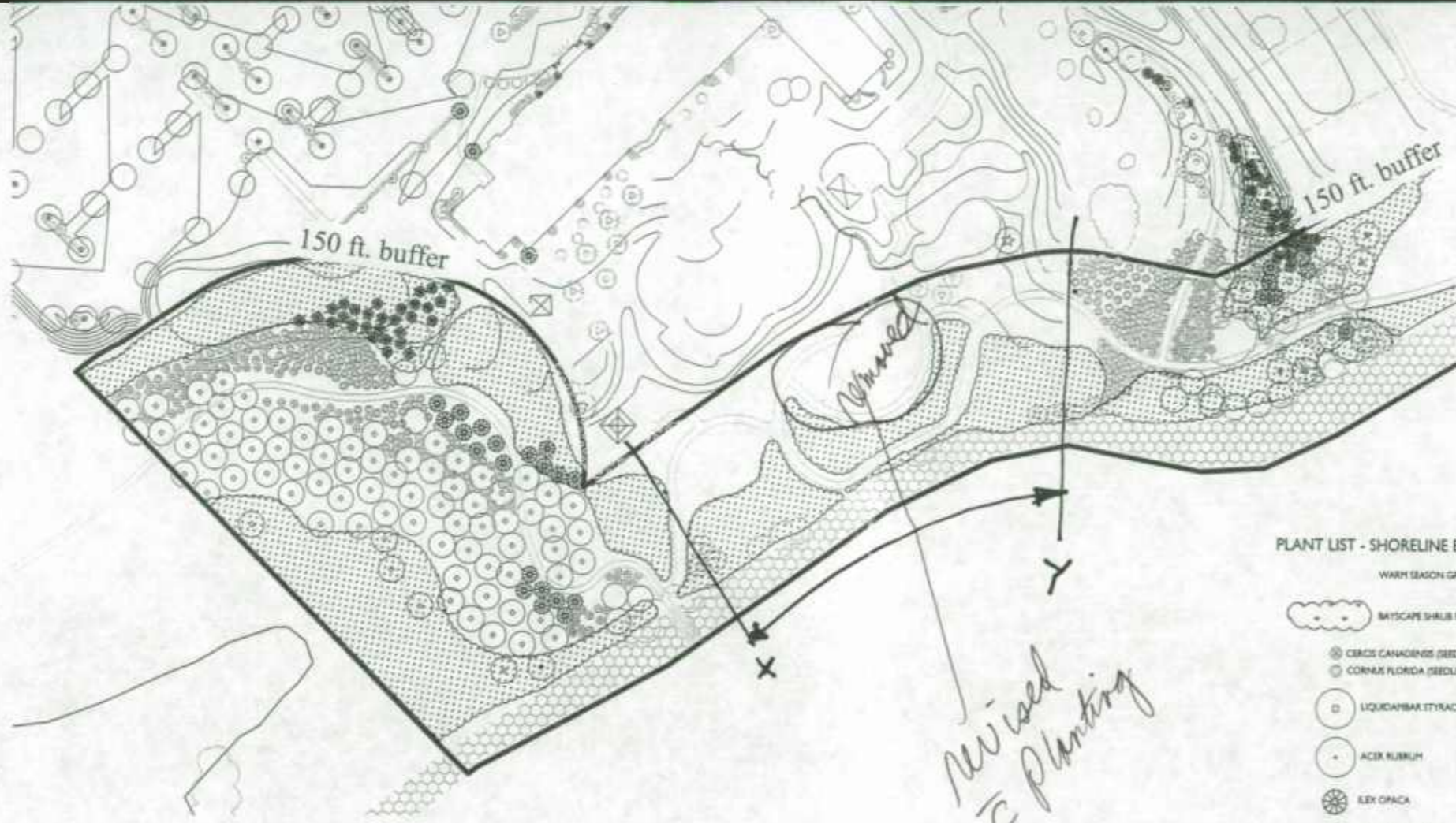


Environmental Concern Inc.  
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St. Michaels, MD 21663

Four Seasons  
Kent Island, MD

rev. July 22, 2004  
1 inch = 100 ft.





PLANT LIST - SHORELINE BUFFER

- WARM SEASON GRASS HXK
- BAYSCAPE SHRUB HXK
- CERCIS CANADENSIS (SEEDLING, F.O.C.)
- CORNUS FLORIDA (SEEDLING, F.O.C.)
- LIQUIDAMBAR STYRACIFLUA
- ACER RUBRUM
- ILEX OPACA
- PINUS VIRGINIANA
- BETULA NIGRA
- AMELANCHIER CANADENSIS
- JUNIPERUS VIRGINIANA
- QUERCUS PHELLOS
- FRAXINUS PENNSYLVANICA

*Revised  
Planting*

PLATE 3a  
Phase 2 - Buffer Management Plan  
Chester River - Club House

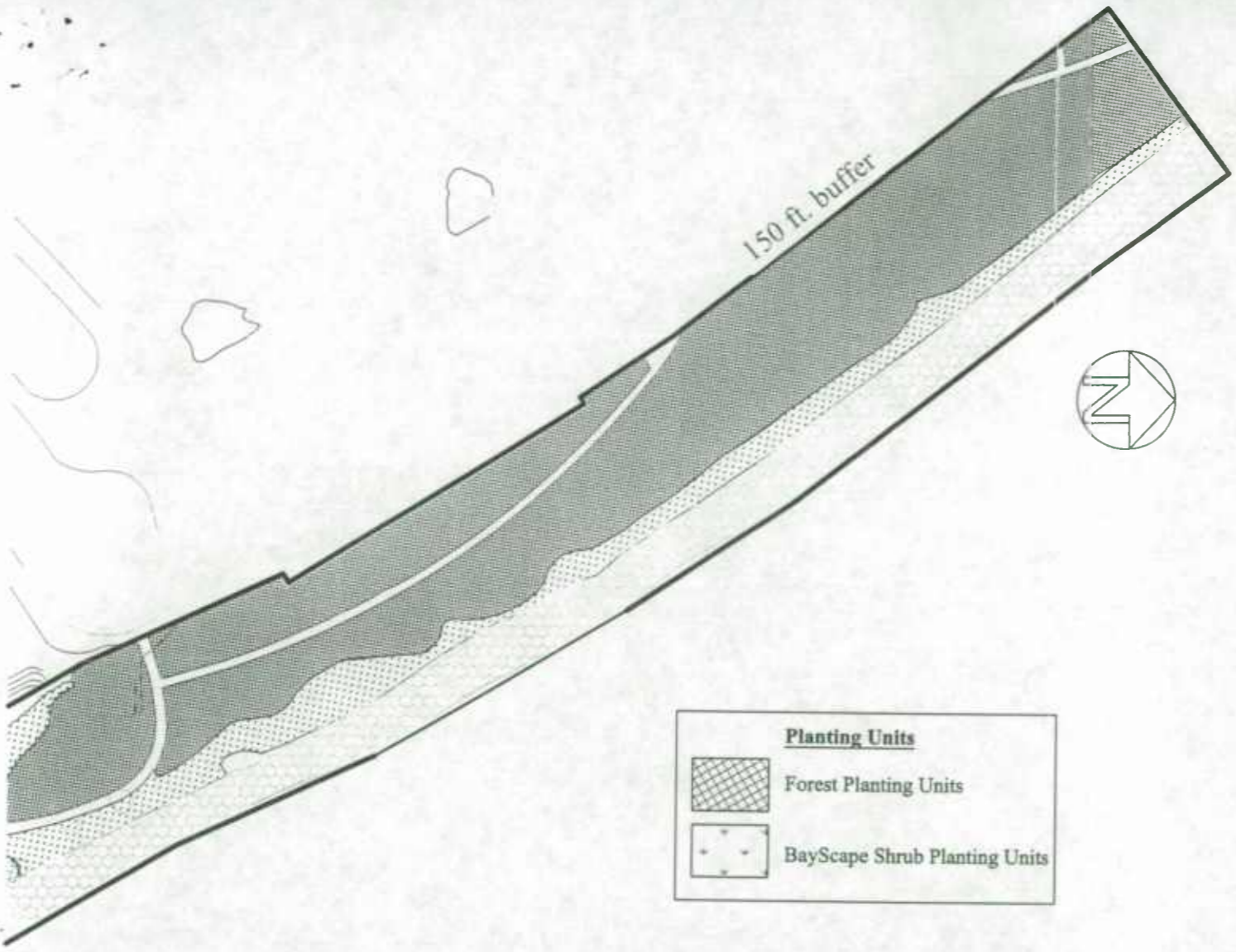
**LandDesign**

1414 Prince Street, Suite 400 Alexandria, VA 22314  
V: 703.549.7784 E: 703.549.4984





Environmental Concern Inc.  
P.O. Box P  
St. Michaels, MD 21663





**Planting Units**

-  Forest Planting Units
-  BayScape Shrub Planting Units

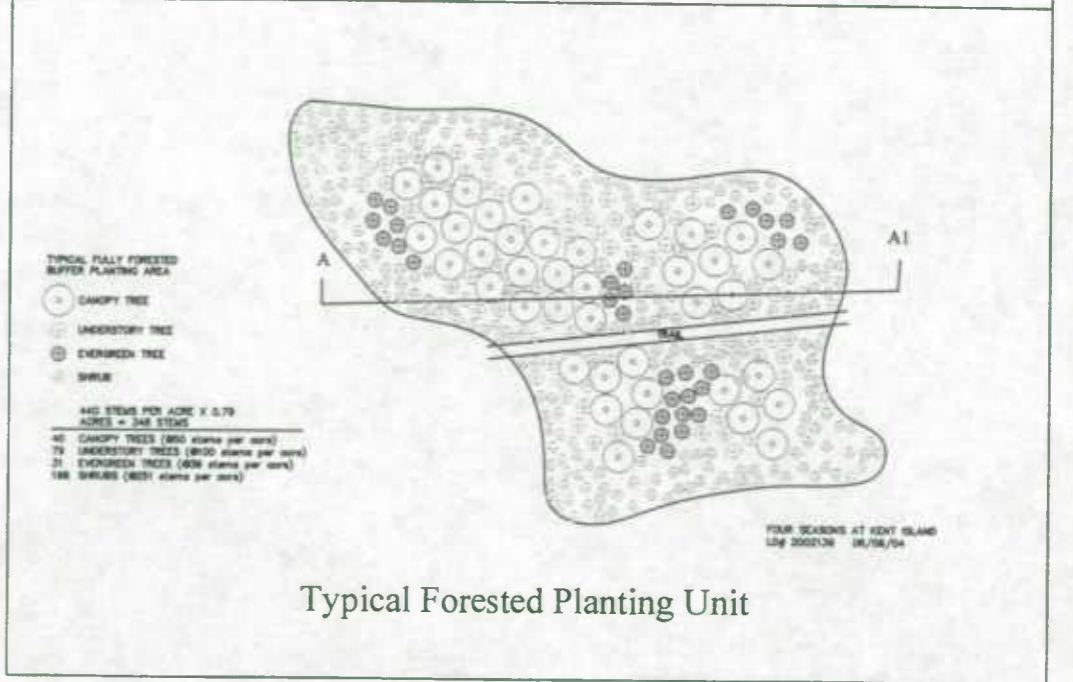
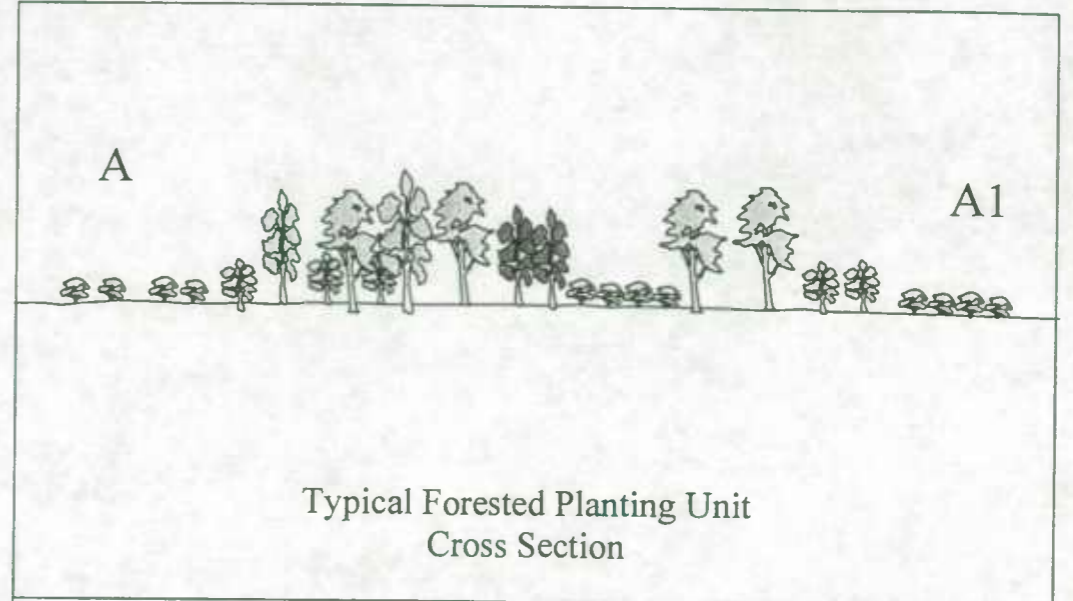



PLATE 3b  
Phase 2 - Buffer Management Plan  
Chester River-North Buffer

**LandDesign**

1414 Prince Street, Suite 400 Alexandria, VA 22314  
V: 703.549.7784 F: 703.549.4984

 Environmental Concern Inc.  
P.O. Box P  
St. Michaels, MD 21663

Four Seasons



Keith Laakey -

J Jackson: panel chair -

Critical Area Commission

C/M

STAFF REPORT  
September 1, 2004

many

APPLICANT: Worcester County (Coastal Bays Watershed)

PROPOSAL: Amendment - Bay Point Plantation Growth Allocation

COMMISSION ACTION: Vote

Cleaned up  
to Redevelop site  
RCA -  
IDA

PANEL: Joe Jackson (Chairman), Frank Dawson, Judith Evans,  
Tracey Gordy, Stevie Prettyman

Thank To

PANEL RECOMMENDATION: Pending Panel Discussion

STAFF: LeeAnne Chandler, Mary Owens, Ren Serey

APPLICABLE LAW/  
REGULATIONS: Natural Resources Article §8-1808.1 and COMAR  
27.01.02.06

DISCUSSION:

Worcester County is requesting Commission review and approval of a request for growth allocation to change the Critical Area designation on 38 acres of a 141-acre property from Resource Conservation Area (RCA) to Intensely Developed Area (IDA). The subject property (Tax Map 21, Parcel 257) is located immediately south of the intensely developed community of Ocean Pines in northern Worcester County. It is waterfront to Turville Creek, a tributary to Isle of Wight Bay.

Historically and up until early 2003, the property was used as a commercial campground and mobile home park. Forty-three "camper" sites and seven mobile homes were scattered in an 18-acre area of the site. In addition to the campers and mobile homes, numerous dock structures were built along the natural shoreline and manmade lagoons. Most of the property is forested, including extensive areas of non-tidal wetlands. The proposed use of the property is a 33-lot single-family residential subdivision. The growth allocation area includes the former campground portion of the site as well as an area for a proposed community septic system. Lot sizes range from approximately 0.3 acres to 1.45 acres and 22 of the 33 lots have frontage on tidal marsh or open water. With the exception of the entrance road, all portions of the site that would be impacted by the development are included within the development envelope. The balance of the property will remain RCA. The IDA portion of the site will be subject to the 10% pollutant reduction requirement of the Criteria and the Worcester County Program.



Conservation Easement

With several thousand feet of frontage on tidal wetlands or tidal waters, the site has a significant area that falls within the 100-foot Buffer. In addition to the Buffer, the other Habitat Protection Area present on site is habitat for forest interior dwelling birds (FIDs). The extent of pre- and post-development FIDs habitat was analyzed and calculated based on the Commission's guidance paper on the conservation of FIDs in the Critical Area that was approved in June 2000. The proposal follows the site design guidelines by restricting development to the existing forest edge (within 300 feet of a canopy opening). The property owner has proposed mitigation for FIDs habitat impacts on site by allowing two existing fields to naturally regenerate. The estimated impact associated with clearing of FIDs habitat is approximately 5.72 acres and the area proposed for natural regeneration is 7.68 acres.

The County's Critical Area Program sets forth a number of guidelines from the Critical Area Criteria to be considered when locating new IDAs or Limited Development Areas (LDAs). The proposal meets the adjacency guideline, i.e., that new IDAs should be located in existing LDAs or adjacent to existing IDAs, because the new IDA will be adjacent to the existing IDA of the community of Ocean Pines to the north. One development envelope is proposed and it contains all lots and the proposed septic disposal area. The County Program states that new IDAs should be located to minimize impacts to HPAs and in a manner that optimizes benefits to water quality. With the removal of existing failing septic systems that had direct outfalls to Turville Creek and the proposed FIDs mitigation, the County feels that this guideline has been met. With regard to the guideline to locate new IDAs at least 300 feet from tidal waters or tidal wetlands, the applicant is not proposing to comply with this guideline. The applicant is requesting Buffer Management Area designation of previously developed portions of the property in order to allow the application of "varying Buffer widths." This flexibility is being requested to facilitate the development of a 33-lot subdivision located primarily in previously developed portions of the site, to minimize impacts to large areas of tidal and nontidal wetlands, and to allow the permanent protection of 103 acres of FIDs and wildlife habitat.

The County Planning Commission considered the request in December and forwarded the proposal to the County Commissioners with a favorable recommendation in late January. The County Commissioners held a public hearing in April and subsequently found it consistent with the intent of the County's Atlantic Coastal Bays Critical Area Program and approved the request. The County Commissioners' review of the project included a rezoning request. The approval of the rezoning request was made subject to the following conditions:

1. There shall be no more than 33 dwelling units.
2. All existing piers shall be removed and a single community marina with the number of slips not to exceed 75% of the number of lots shall be provided.
3. A conservation easement shall be placed over all lands not included within the developed area of the subdivision and shall include the FIDs habitat areas.
4. A greenbelt easement of at least 50 feet in width shall be maintained and left undisturbed adjacent to the boundary with the subdivision of Ocean Pines.
5. The rezoning from A-1 Agricultural District to R-1 Rural Residential District and C-1 Conservation District shall become effective upon the award of growth allocation, approval of the buffer management plan for the subdivision, creation of the water and/or sewer service area, and the approval of the necessary amendment to the Water

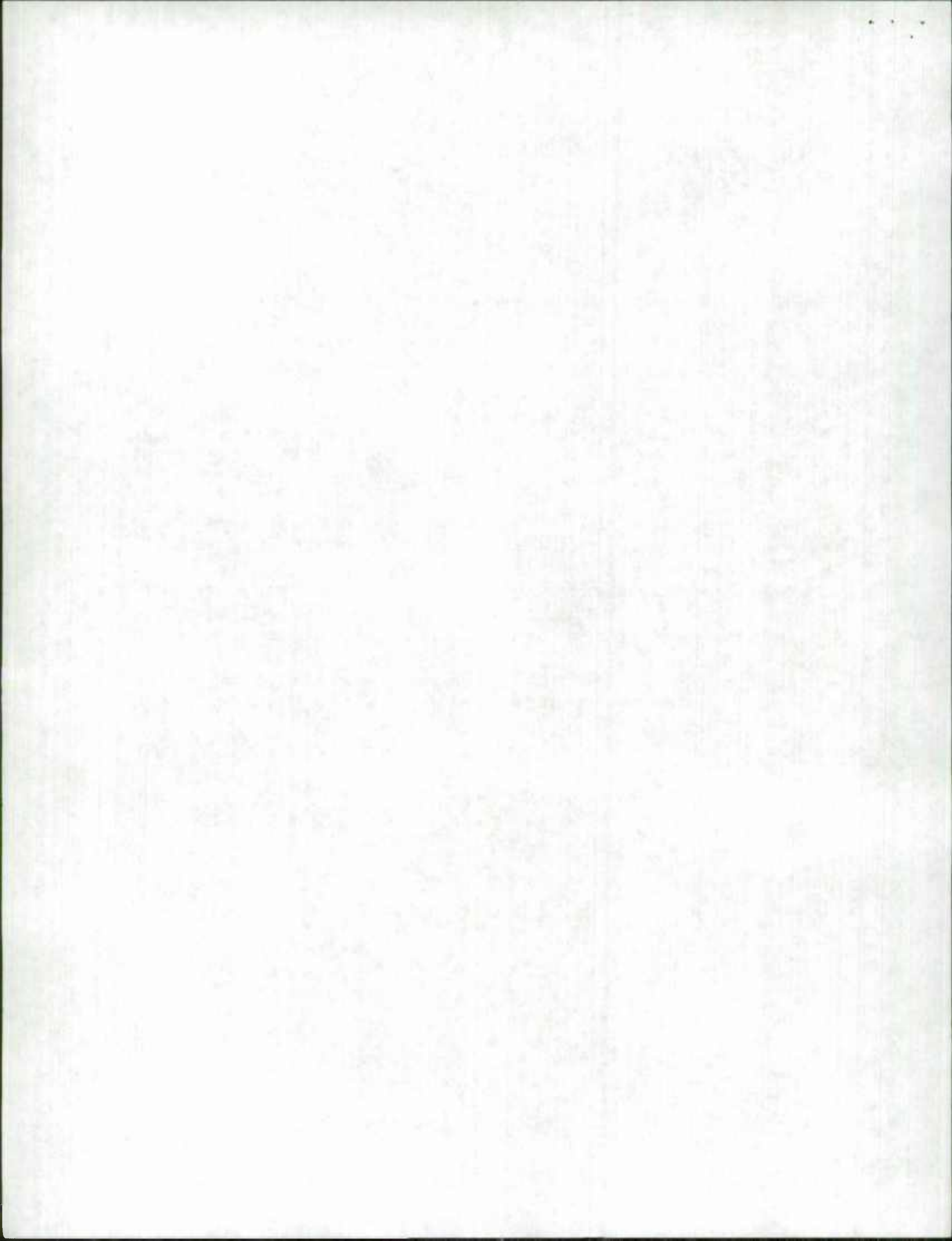


- and Sewer Plan but no later than September 1, 2004.
6. A plat shall be submitted showing the metes and bounds measurements of the zoning boundary between the R-1 Rural Residential and C-1 Conservation Districts.
  7. Wetlands shall be restored as shown on Exhibit #5 submitted at the public hearing and as proffered by the applicant.

The Panel held a public hearing on August 2, 2004 in Snow Hill. No one from the public testified at the hearing and no written comments were received. Following the hearing, the Panel met to discuss the growth allocation request. The Panel's discussion focused on the following issues:

1. The applicant is simultaneously requesting Buffer Management Area designation, which will preclude the establishment of a 100-foot Buffer on the project.
2. The applicant is proposing to provide long term protection of approximately 103 acres of remaining RCA land for FIDs and wildlife habitat, and appropriate legal instruments will need to be recorded. Also, the long-term viability of the areas left to naturally regenerate should be assessed and guaranteed through supplemental plantings if necessary.
3. The applicant has stated that the design of the project was developed to minimize impacts to wetlands and still provide appropriate stormwater quality management. This issue was discussed by the Panel and Commission staff. There are some concerns about the long-term effects of stormwater ponds on the wetlands as well as the feasibility of certain Best Management Practices under the site's constraints. The Panel requested the applicant to provide more specific information regarding stormwater management.

The Panel will be meeting the morning of the Commission meeting to decide upon a recommendation to make to the full Commission.





Jrg. — approval based on 70 conditions —  
M. Bailey second / u/c

## ISSUES FOR DISCUSSION ON BAY POINT PLANTATION GROWTH ALLOCATION

1. A conservation easement shall be placed over all lands not included within the developed area of the subdivision and shall include the FIDS habitat areas. The conservation easement for this area shall include provisions that ensure its viability as FIDS habitat and shall be submitted to Commission staff for review and approval.
2. The application involves approximately six acres of impacts to FIDS habitat. At the time that the easement agreement is recorded, the applicant shall prepare a planting plan, for review and approval by Commission staff, to mitigate for these impacts. The plan shall specify the planting of two open field areas, totaling approximately nine acres, with primarily hardwood species. The planting plan may include transplanted stock from areas of the site proposed to be developed. The plan shall be bonded or implemented prior to the issuance of any building permits on the site. The County shall monitor the site and shall coordinate an inspection with Commission staff in the fall of 2006. If Commission staff determines that the planting is not sufficient to meet the requirements for FIDS habitat, then supplemental planting or the removal of invasive species may be required.
3. All stormwater Best Management Practices shall be located within the development envelope. The applicant shall provide a detailed stormwater management plan and revised calculations for review and approval by Commission staff prior to final subdivision approval. The Commission shall seek comments and recommendations from MDE.
4. Prior to final subdivision approval, the applicant shall provide a conceptual Buffer Management Plan for Lots 1, 18, 19, 20, 21, 23, 24, and 25 showing all existing trees and proposed planting materials. The plan shall show the number, type, and location of plantings sufficient to establish a Buffer capable of performing the water quality and habitat functions specified in the County Critical Area Program. The Plan shall be reviewed and approved by Commission staff. This Plan shall be referenced on and recorded with the subdivision plat. The County shall ensure that the Plan shall be bonded or implemented prior to the issuance of certificates of occupancy for each dwelling.
5. There shall be no paths through the Buffer on any lot.
6. There shall be no more than 33 dwelling units.
7. All existing piers shall be removed and a single community marina with the number of slips not to exceed 75% of the number of lots shall be provided.
8. A greenbelt easement of at least 50 feet in width shall be maintained and left undisturbed adjacent to the boundary with the subdivision of Ocean Pines to provide a wildlife corridor connecting forested upland areas to the 100-foot Buffer. Underground

utilities may be installed in this area.

9. Wetlands in the area of the two dredge disposal sites shall be restored as proffered by the applicant.
10. If the project is not served by a public sewer system and the effluent drainfield reserve area is required to be cleared, and the drainfield installed, then the growth allocation acreage shall be adjusted to include this area and the conservation easement shall be appropriately amended.

**ISSUES FOR DISCUSSION ON BAY POINT PLANTATION  
BUFFER MANAGEMENT AREA GROUP E DESIGNATION**

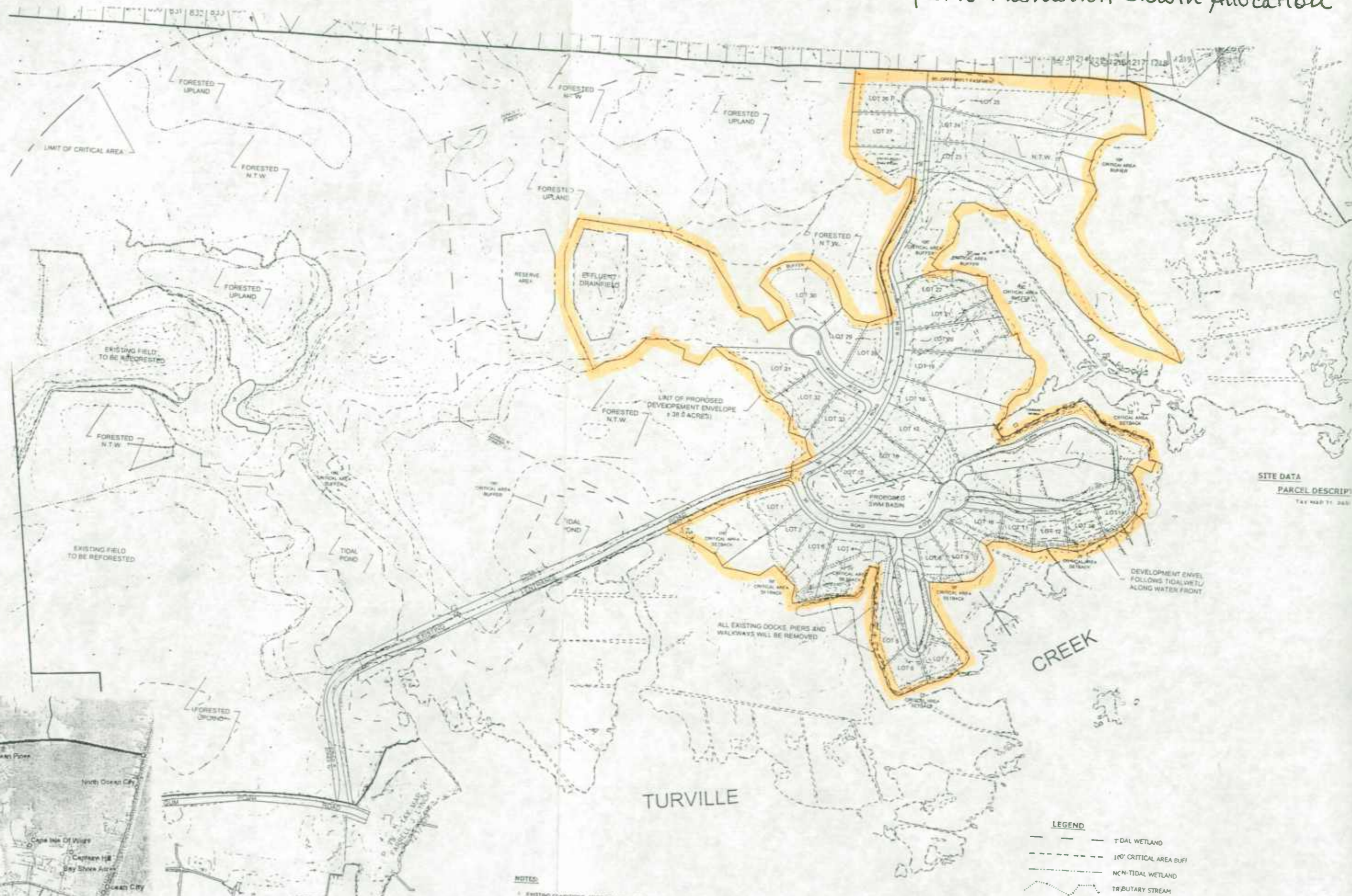
1. The applicant shall be required to prepare a two-phased Buffer Management Plan for Lots 4, 5, 6, 7, 10, 11, 12, 13 and 14 showing a 25-foot setback and for Lots 2, 3, 8, 9, and 22 showing a 50-foot setback. Prior to final subdivision approval, the applicant shall provide the first phase of the Buffer Management Plan showing all existing trees within the 25-foot setback and 50-foot setback for and proposed planting. The Plan shall show the number, type, and location of plantings sufficient to establish a Buffer capable of performing the water quality and habitat functions specified in the County Critical Area Program. The Plan shall be reviewed and approved by Commission staff and shall be bonded or implemented prior to recordation of the plat. The plantings in the 25-foot and 50-foot setback shall be in addition to any other planted mitigation requirements set forth in the County's zoning ordinance. The second phase of the Buffer Management Plan shall show the mitigation plantings necessary to comply with the County's 1.5% of construction cost requirement and one-to-one replacement for natural vegetation removed within the Buffer (and outside of the 25-foot and 50-foot setback) for each lot. The County shall review and approve the Buffer Management Plan for each lot. The second phase of the Buffer Management Plan shall be bonded or implemented prior to the issuance of certificates of occupancy for each dwelling.
2. There shall be no paths through the 25-foot setback or 50-foot setback on any lot.

*J.J. adopt  
recommendations  
for  
conditions  
send into  
the record*

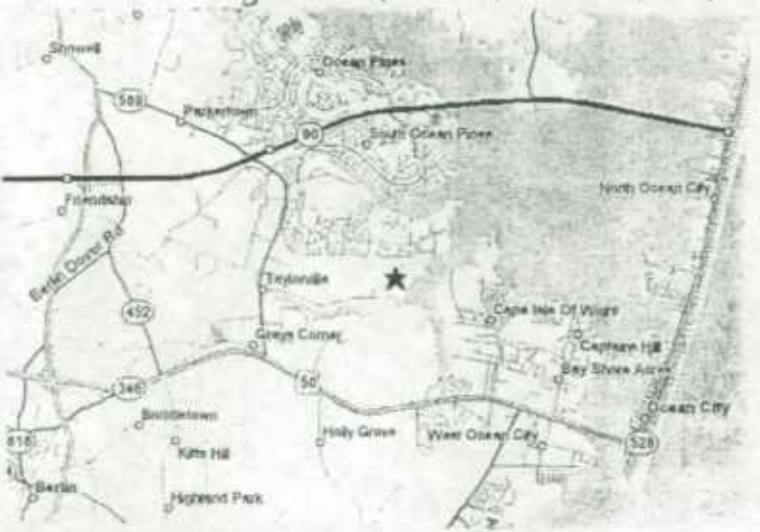
*J. Evans  
sec -  
n/c*



# Bay Point Plantation Growth Allocation

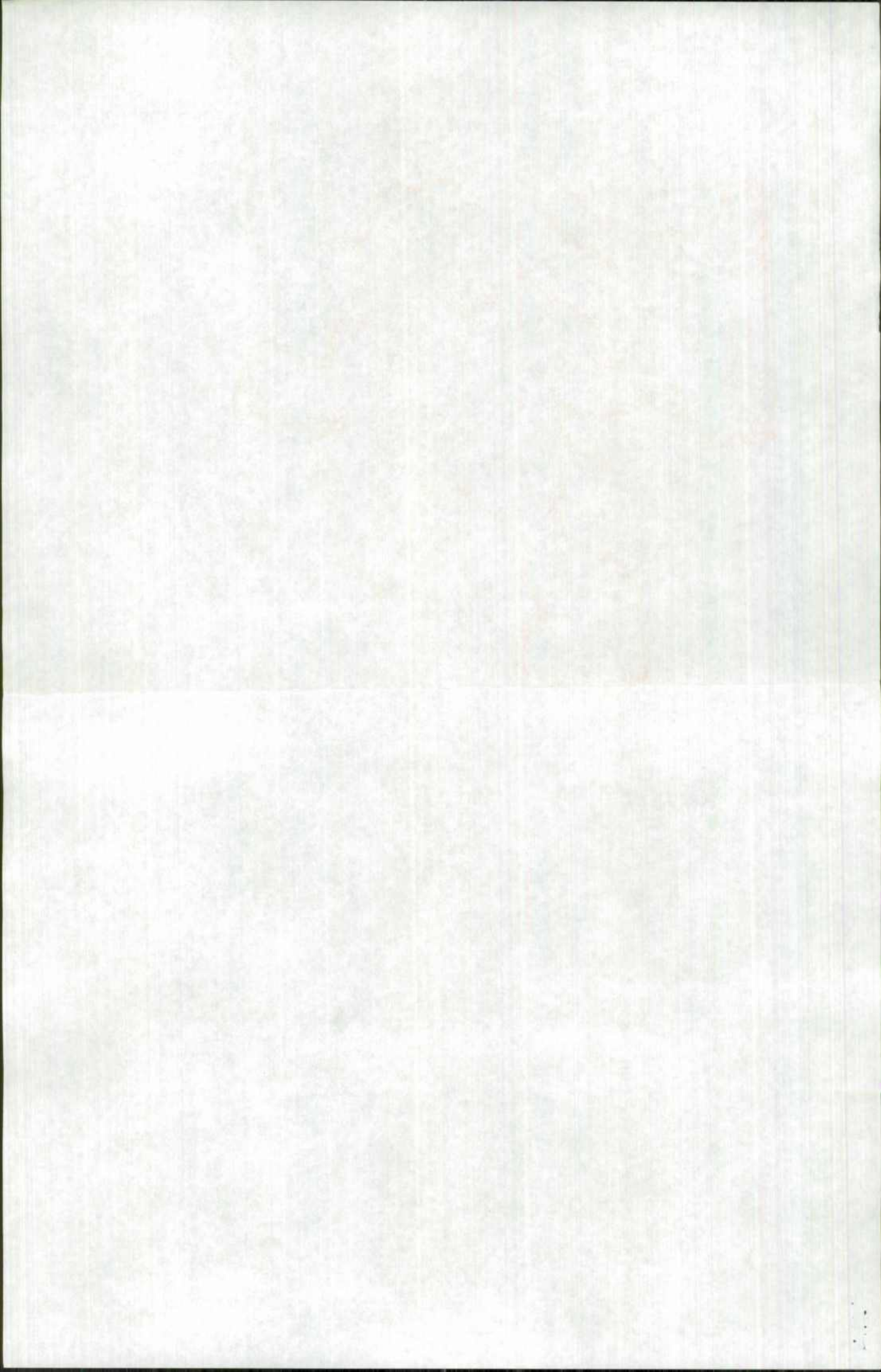


## Vicinity Map



**NOTES:**  
 1. EXISTING CONDITIONS







## Critical Area Commission

STAFF REPORT  
September 1, 2004

*Mary*  
*JJ*  
*J. Evans*  
*sec.*  
*u/c*

**APPLICANT:** Worcester County (Coastal Bays Watershed)

**PROPOSAL:** Amendment – Buffer Management Area Group E Designation

**COMMISSION ACTION:** Vote

**PANEL:** Joe Jackson (Chairman), Frank Dawson, Judith Evans, Tracey Gordy, Stevie Prettyman

**PANEL RECOMMENDATION:** Pending Panel Discussion

**STAFF:** LeeAnne Chandler, Mary Owens, Ren Serey

**APPLICABLE LAW/  
REGULATIONS:** Natural Resources Article §8-1809(o), COMAR 27.01.09.01(C)(8)

### DISCUSSION:

Worcester County is requesting Critical Area Commission review and approval of the designation of a new Buffer Management Area (BMA) for inclusion in the County's Buffer Management Area Program. (The County uses the term Buffer Management Area in place of the term "buffer exemption area" used in the Critical Area Criteria.) The designation includes the creation of a new "group" and the mapping of a portion of the shoreline of Bay Point Plantation as a BMA. The proposed Group E Buffer Management Area would be limited to this particular property and it would provide for varied setbacks from the water.

As of June 1, 2002 (the effective date of the Atlantic Coastal Bays Protection Act), the property was in use as a commercial campground/trailer park. It contained dilapidated mobile homes and campers that had been modified to include at grade decks, carpeted "yards", and cinder block campfire pits. In association with each unit was a septic drainfield but many of the drainfields were being bypassed, with the sewage flow being directed to Turville Creek or the tidal marsh. The property also contained numerous illegal docks that extended into the waters of Turville Creek.

In designating the new Group E Buffer Management Area, the County made findings that the existing pattern of development as of June 1, 2002 prevents the Buffer from fulfilling the

*Trying to use ex isting roads + has some lots  
c different Buffer of 25 feet*

functions set forth in the Atlantic Coastal Bays Protection Act due to the existing campers and mobile homes, septic disposal areas and other manmade improvements located directly adjacent to the shoreline or tidal wetlands. The County also found that the Buffer's effectiveness at minimizing the effects of human activities on the wetlands and tidal waters is limited due to the location of the existing development, existing sanitation violations and the lack of understory vegetation. These features also prevent the Buffer from acting as transitional habitat between aquatic and upland communities.

The proposed setbacks for the waterfront lots on the property range from 25 feet to the full 100-foot Buffer. A total of nine lots would have a 25-foot setback, five would have a 50-foot setback and the remaining eight waterfront lots would have the standard 100-foot Buffer. In establishing Group E, the County Commissioners conditioned their approval on the stipulations that no lots within the subdivision shall have riparian rights (individual private piers will not be permitted; a community pier is proposed), no vegetation shall be removed within the respective buffers, no walkways or paths in or through the Buffer shall be permitted and all the restrictions shall be stipulated in the deed covenants.

The County's Buffer Management Area Program sets forth specific mitigation requirements for development of single-family dwellings in a Buffer Management Area. The property owner must submit a proposed landscaping plan showing all existing trees on the site (those to be retained and those to be removed) and proposed planting materials. The cost of new planting materials to be utilized shall be equivalent to 1.5% of the cost of construction multiplied by the percentage of the overall project that is located within the 100-foot Buffer. Also, in addition to the 1.5%, any natural vegetation removed within the Buffer must be replaced onsite on an equal basis. The County's Buffer Management Area Program allows subdivision "if the subdivision will result in an overall environmental benefit." No further subdivision of this property is proposed because the project is limited to 33 dwelling units based on the County Health Department's assessment of existing approved sewage disposal systems and sewage disposal capacity at the site.

This area is not typical of those generally proposed for designation as a Buffer Management Area in Worcester County and other jurisdictions because although the area was developed, portions of the Buffer were forested and did perform some of the functions of the Buffer. The County believes that the adverse environmental impacts associated with use of the property as a campground were such that its continued use would have resulted in significant environmental degradation. It is the County's position that the application of "varying Buffer widths" will provide the flexibility necessary to develop the property in an economically viable way, with new development located in previously developed portions of the site, impacts to large areas of tidal and nontidal wetlands minimized, and approximately 103 acres of Forest Interior Dwelling bird (FID) and wildlife habitat permanently protected.

The Panel held a public hearing on August 2, 2004 in Snow Hill. No one from the public testified at the hearing and no written comments were received. Following the hearing, the Panel met to discuss the BMA designation. The Panel's discussion focused on three issues:

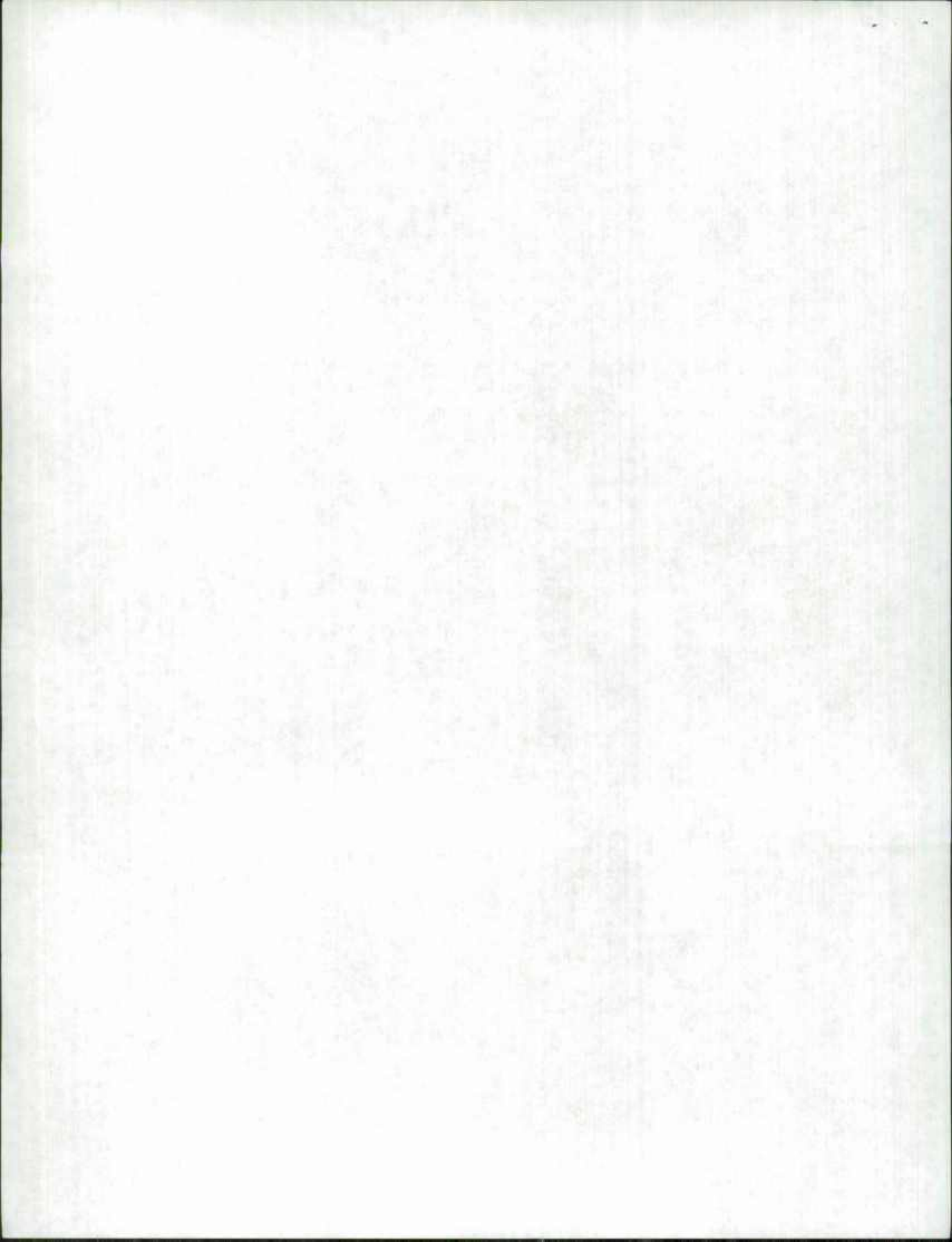
1. The relation of the County's designation of the Buffer Management Area to the proposed



redevelopment of the site through the use of growth allocation. The applicant has stated that the BMA designation is necessary to properly and efficiently redevelop site and that the project was developed to minimize impacts to wetlands and still provide appropriate stormwater quality management. In order to do this, the applicant tried to use existing roads and keep the lots in developed areas. As a result, nine of the lots are approximately 100 feet deep. On these lots, the setback will need to be carefully designed to ensure that some water quality and habitat benefits are provided. It is anticipated that the 1.5% of the cost of construction planting required will be directed to this area first. The Program Subcommittee discussed a minimum 50-foot setback for the entire shoreline during review of this proposal in September 2003.

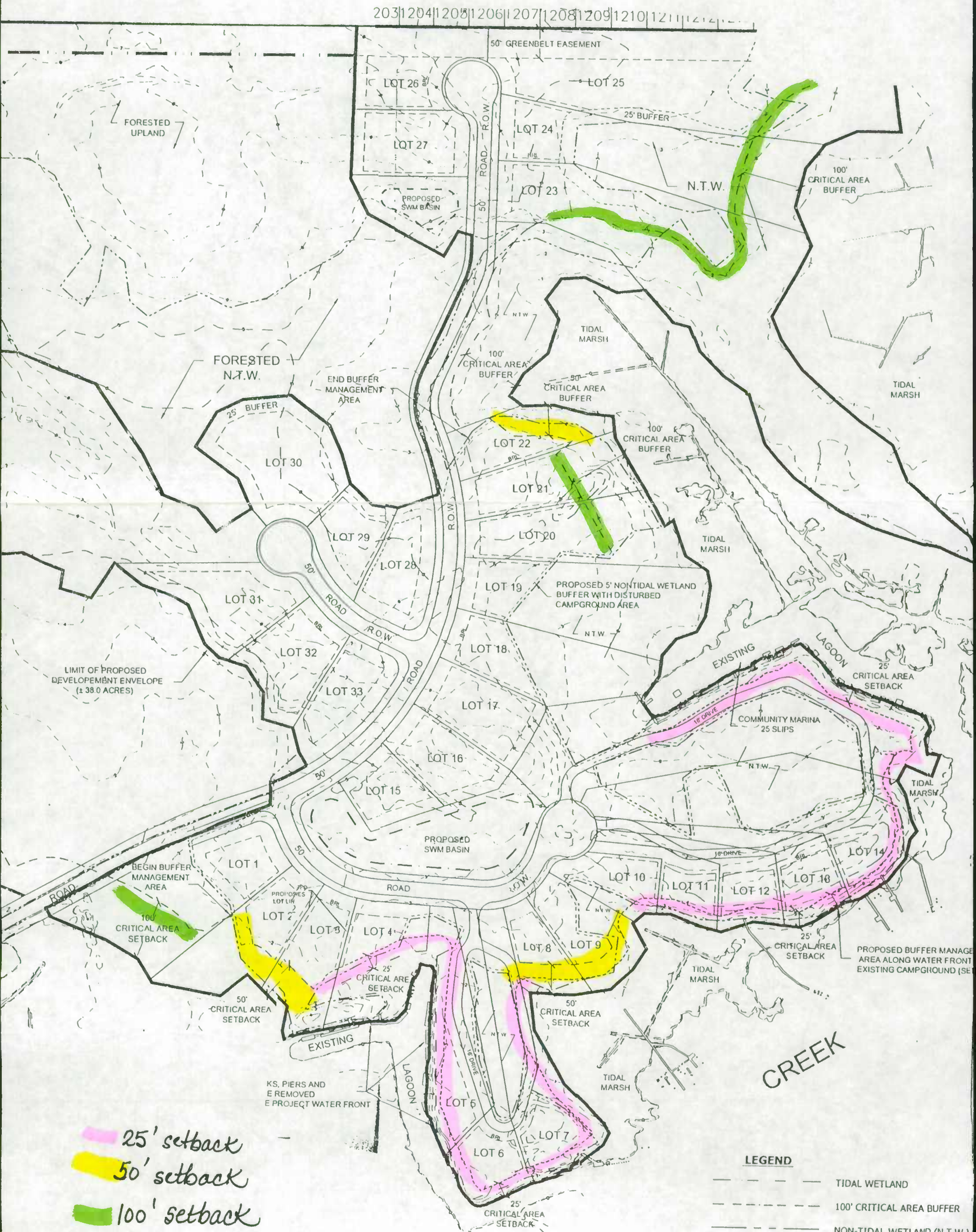
2. The Commission has required Buffer Management Plans on several growth allocation projects involving new Intensely Developed Areas (IDAs) for residential development. Buffer Management Plans are also used to ensure that appropriate mitigation is implemented for development on lots designated as Buffer Management Areas.
3. The possibility of future connections to public sewer service and its effect on this project was discussed. Further subdivision of the property would impact the resources that the applicant designed the subdivision to avoid, namely the FIDs habitat and expanses of forested wetlands.

The panel will be meeting the morning of the Commission meeting to decide upon a recommendation to make to the full Commission.

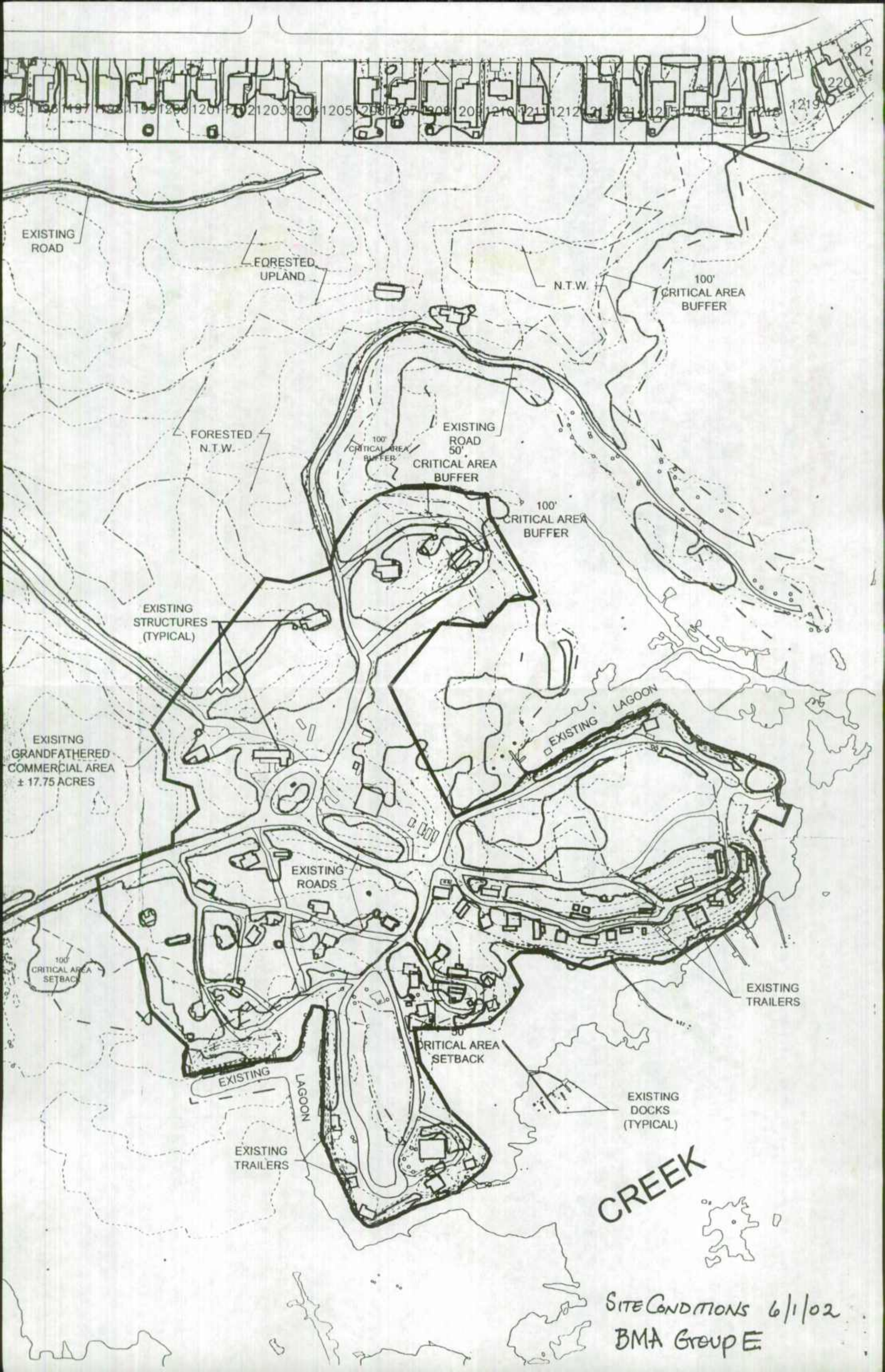




# Buffer Management Area Group E







EXISTING ROAD

FORESTED UPLAND

N.T.W.

100' CRITICAL AREA BUFFER

FORESTED N.T.W.

100' CRITICAL AREA BUFFER

EXISTING ROAD 50' CRITICAL AREA BUFFER

100' CRITICAL AREA BUFFER

EXISTING STRUCTURES (TYPICAL)

EXISTING LAGOON

EXISTING GRANDFATHERED COMMERCIAL AREA ± 17.75 ACRES

EXISTING ROADS

100' CRITICAL AREA SETBACK

EXISTING TRAILERS

CRITICAL AREA SETBACK

EXISTING LAGOON

EXISTING TRAILERS

EXISTING DOCKS (TYPICAL)

CREEK

SITE CONDITIONS 6/1/02  
BMA Group E



**CRITICAL AREA COMMISSION**  
**1804 West Street, Suite 100**  
**Annapolis, Maryland 21401**

**MEMORANDUM**

To: Commission Members

From: Kerrie Gallo

Date: September 1, 2004

Subject: Somerset County Growth Allocation Withdrawal

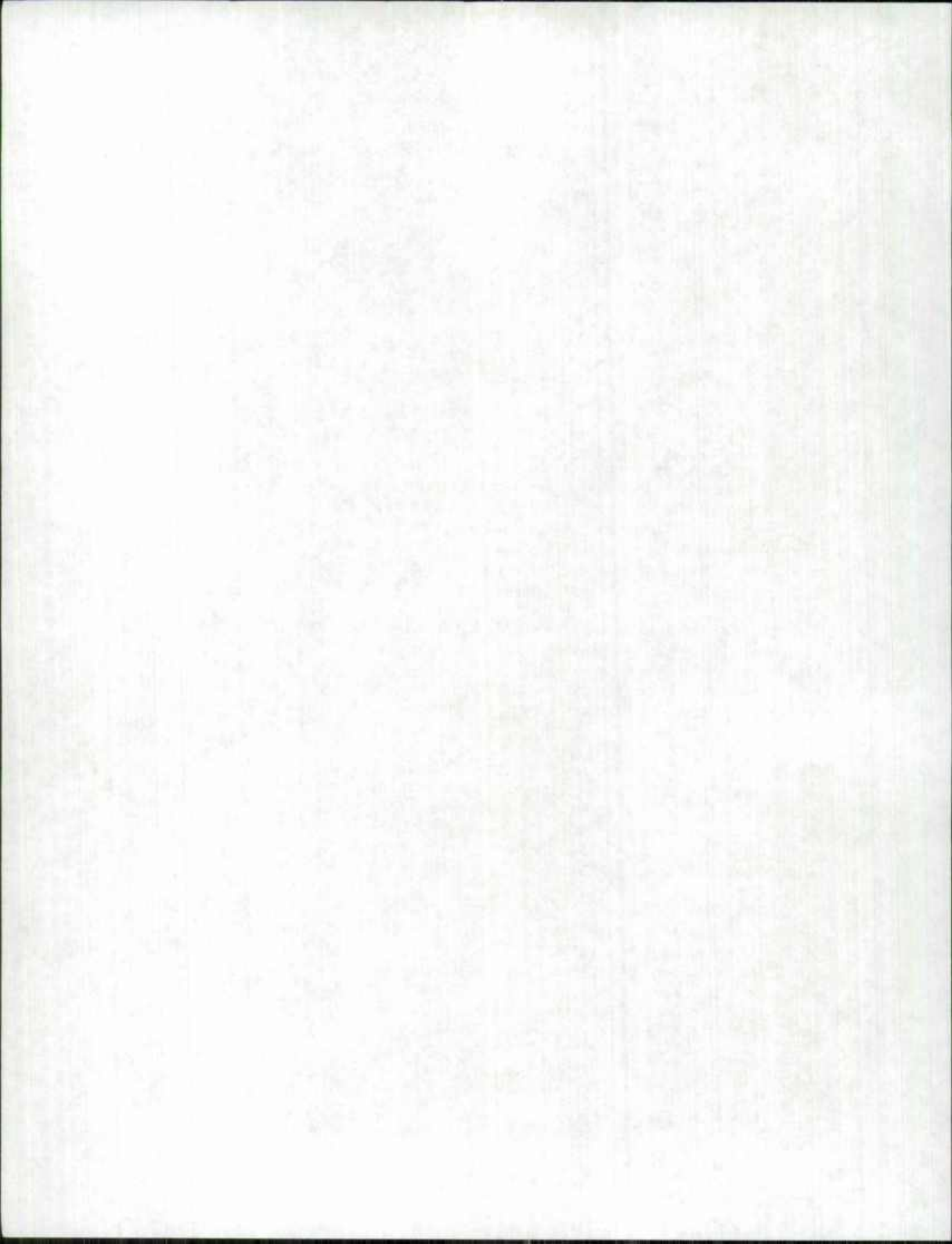
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Recently, the Commission was sent a letter from the Director of Planning and Technical Services, Ms. Joan Kean, regarding an award of growth allocation for the Noble Farm Subdivision, which was approved by the Commission on April 13, 2000. The property is identified as Tax Map 22, Block 23, Parcel 286, and is located on Clarence Barnes Road, on the shore of the Manokin River. In summary, Ms. Kean's letter stated that on July 30, 2004, the Somerset County Commissioners passed a resolution to rescind the growth allocation for Noble Farm and add the 31.4 acres back into the County's Growth Allocation Total.

The use of growth allocation for the project was approved locally on April 26, 2000, when Somerset County filed an Ordinance (No. 720), granting 31.4 acres of County Growth Allocation to 15-lot subdivision project known as, "Noble Farm." The Commission subsequently approved the ordinance and map amendment as a refinement to Somerset County's Critical Area Program, and the Critical Area overlay designation of the property was changed from RCA to LDA.

Somerset County's zoning ordinance states that a project shall be substantially completed within two years or the Department shall recommend withdrawal of the award of growth allocation by County Commissioners. Due to the sudden death of the developer and the inability of the widow to obtain a public works agreement and bond, the project has not been substantially completed in spite of several extensions. The planning office notified the developer by certified letter of the County Commissioners' decisions to rescind the growth allocation.

As requested by Somerset County, the County's Critical Area Maps will be amended and its growth allocation totals will be adjusted in accordance with the County's action to change Noble Farm's 31.4 acres of LDA back to RCA. Following this adjustment, the County will have used 213.25 acres of growth allocation, and will have 1304.18 acres remaining. This information is being presented to you as information on an administrative adjustment to Somerset County's growth allocation total, and does not require a vote.





**CRITICAL AREA COMMISSION**  
**1804 West Street, Suite 100**  
**Annapolis, Maryland 21401**

**MEMORANDUM**

To: St. Michaels Miles Point III, Growth Allocation Panel Members: Gary Setzer, Chair; Dave Blazer; Ed Richards; Joe Jackson; Judith Evans

From: Mary Owens, Lisa Hoerger

Date: August 23, 2004

Subject: Town of St. Michaels: Miles Point III – Conceptual Stormwater Management Plans

At its meeting on May 5, 2004, the Commission voted to approve the Town of St. Michaels request to use 70.863 acres of growth allocation to change a Resource Conservation Area to an Intensely Developed Area to be applied to the Miles Point III project. The following was one of four conditions of that approval:

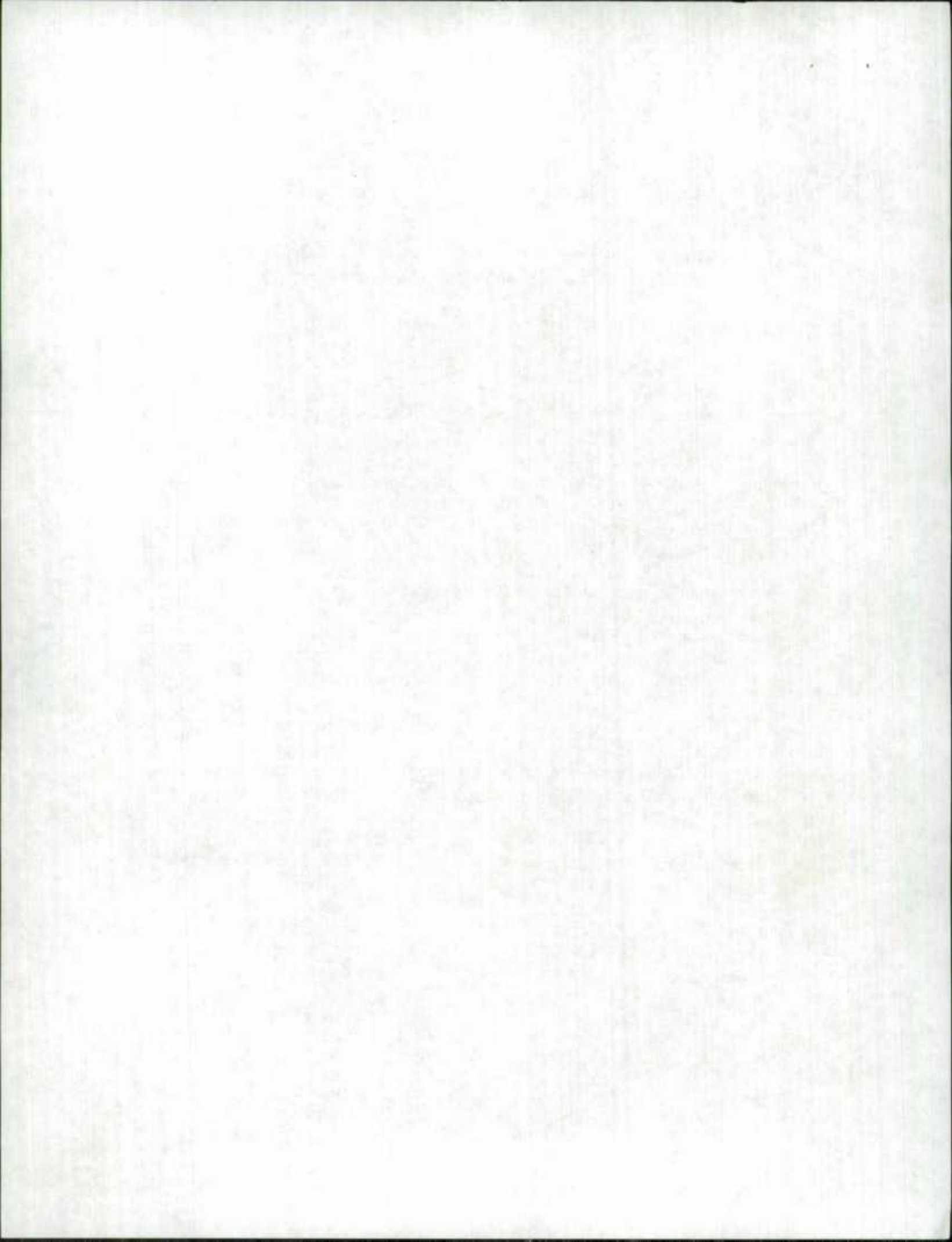
A Stormwater Management Plan shall be developed that promotes environmentally sensitive design and explores all opportunities for infiltration and bioretention before utilizing surface water treatment measures. The Stormwater Management Plan shall be developed cooperatively with the Town and the Commission and their respective staffs. The Stormwater Management Plan shall be reviewed and approved by the Commission.

The Town requested the panel to reconvene at the Commission's September meeting to review and provide comments on a conceptual stormwater management plan proposed by the developer. Attached to this memorandum are the conceptual plans and details provided thus far to Commission staff. The Town will be soliciting feedback from the panel on this conceptual plan.

If you have any questions prior to the meeting, please do not hesitate to contact either Mary Owens or myself at (410) 260-3460.

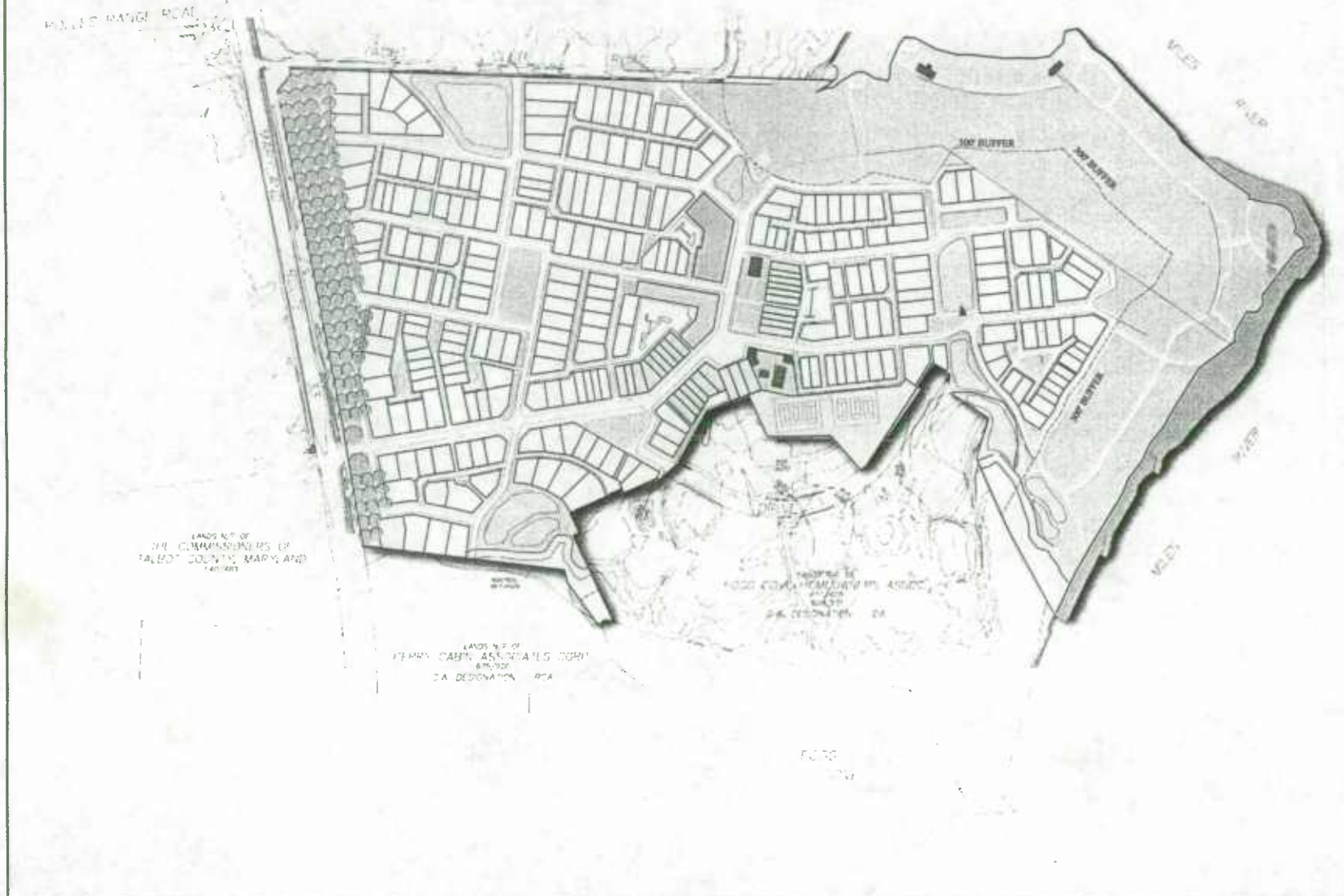
**Attachment**

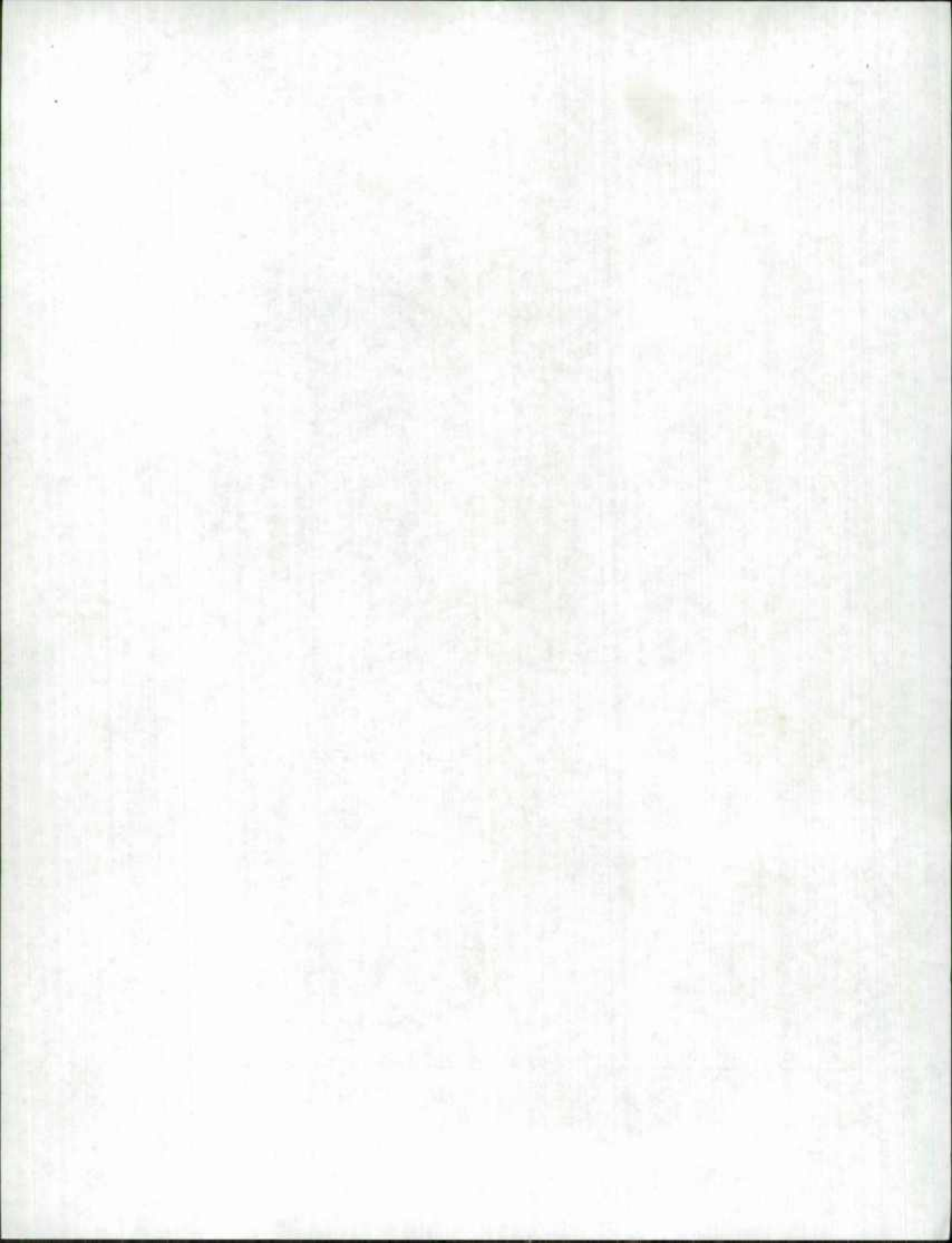
cc: Chairman Madden  
Marianne Mason  
Ren Serey





# Site Plan





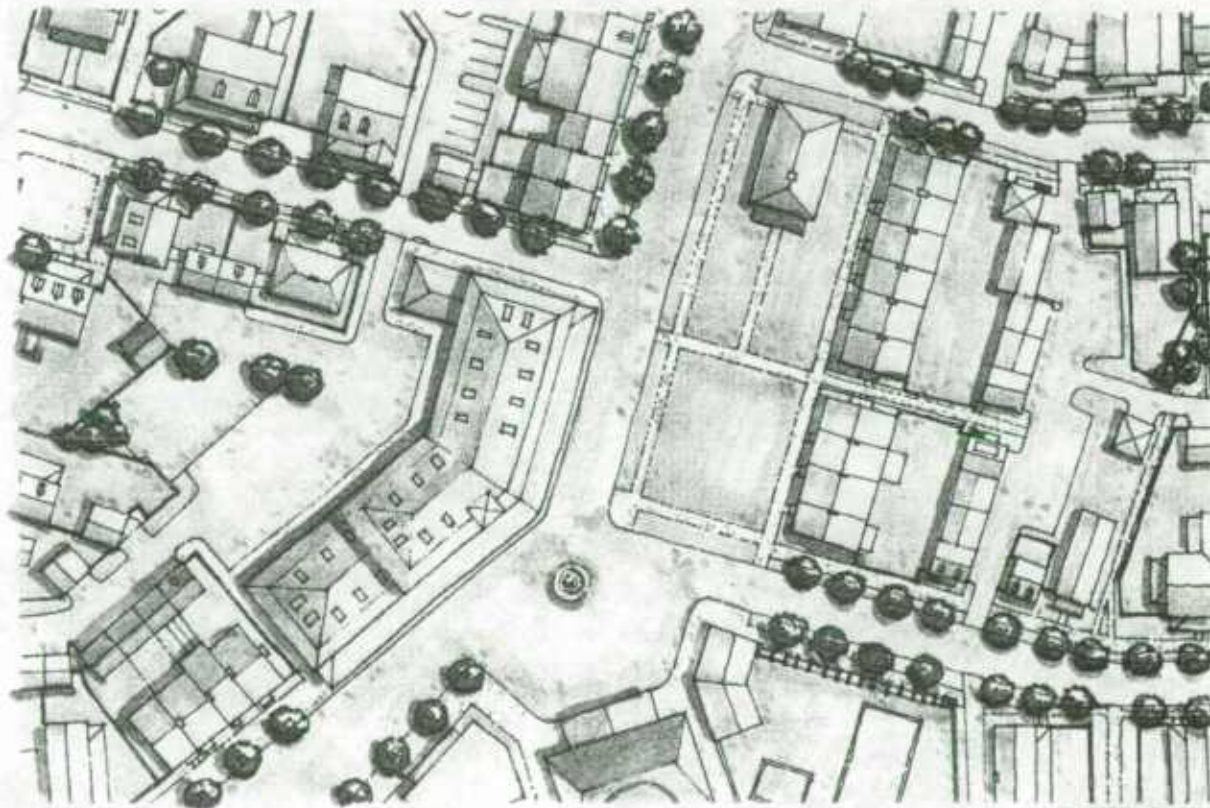


# Neighborhood Center

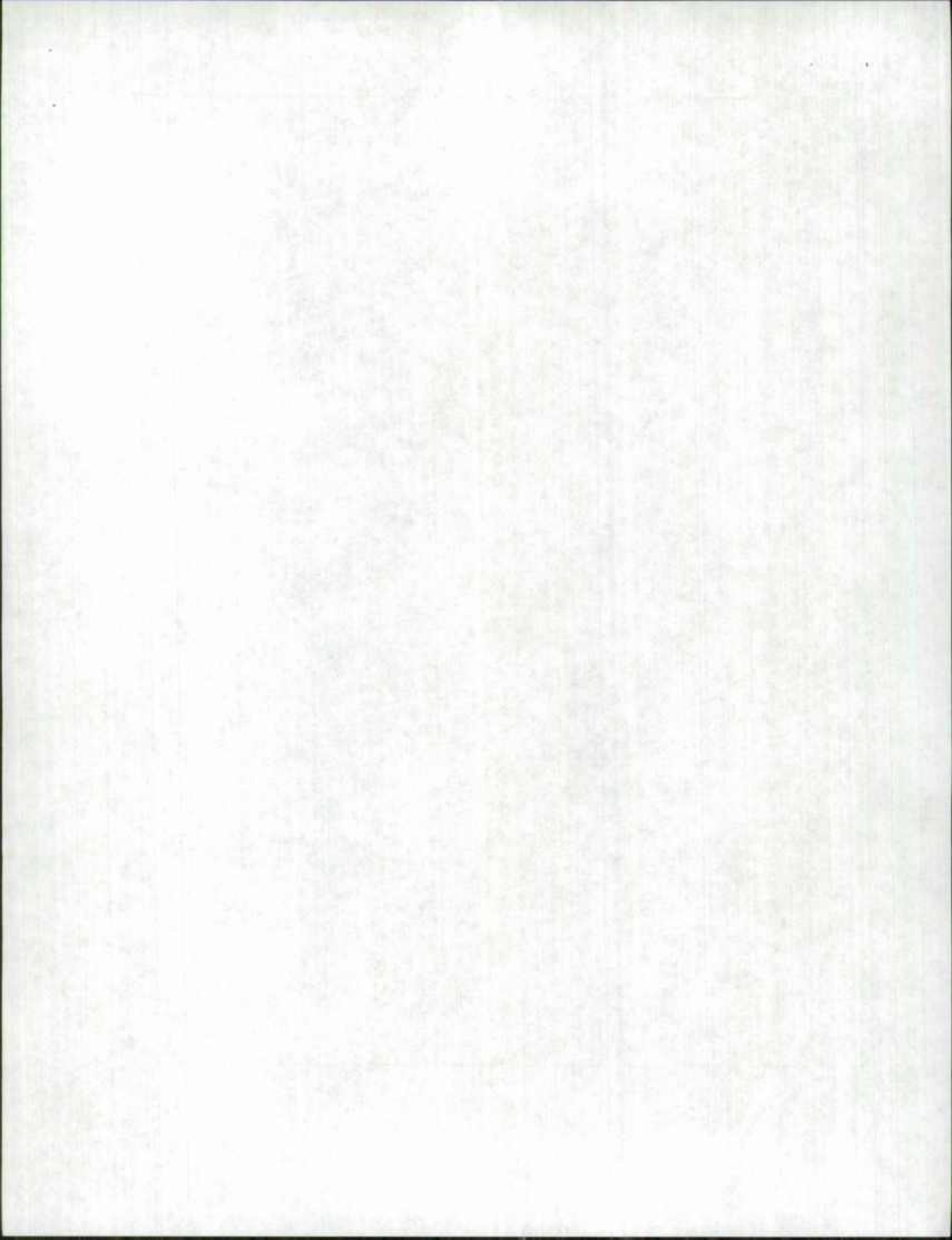
MILES POINT

THE MASTER PLAN DETAILS

Neighborhood Center



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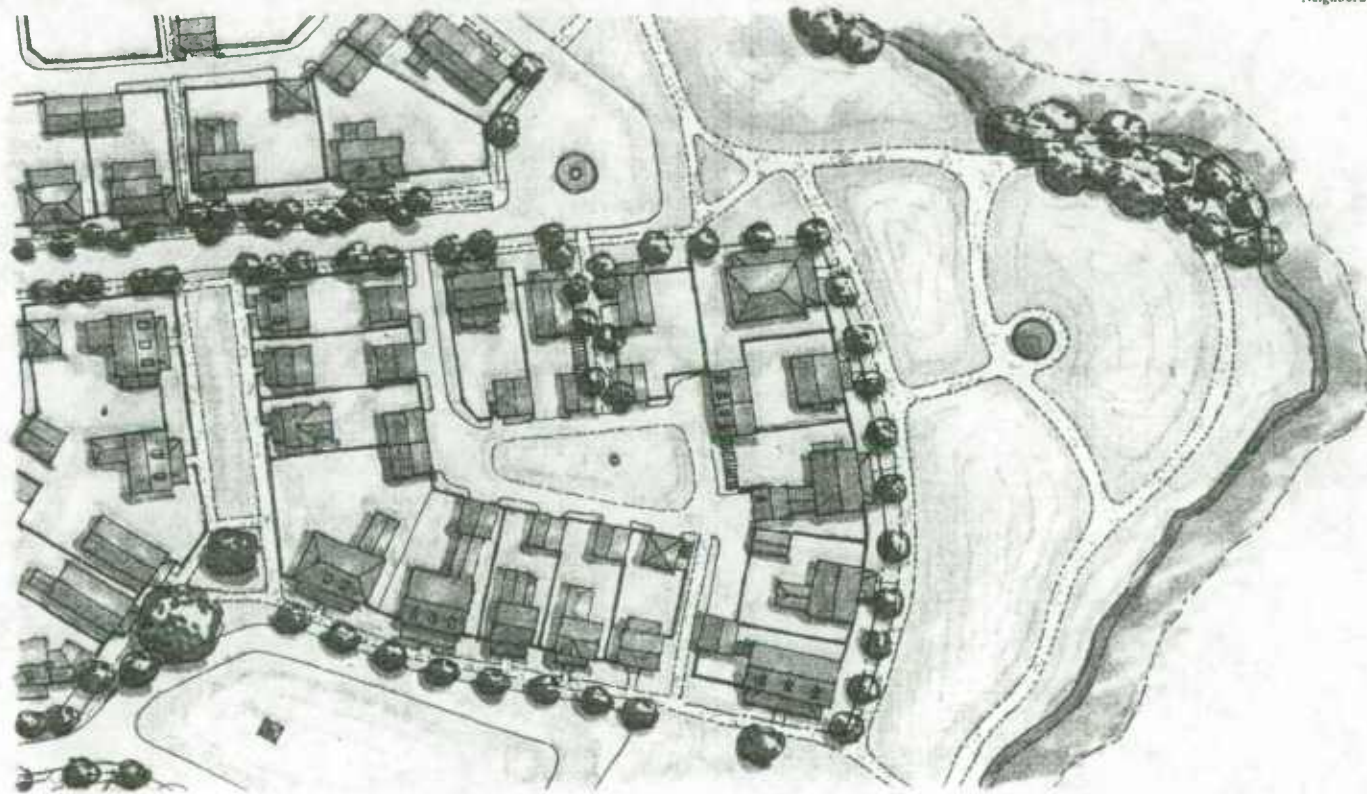


# Neighborhood General

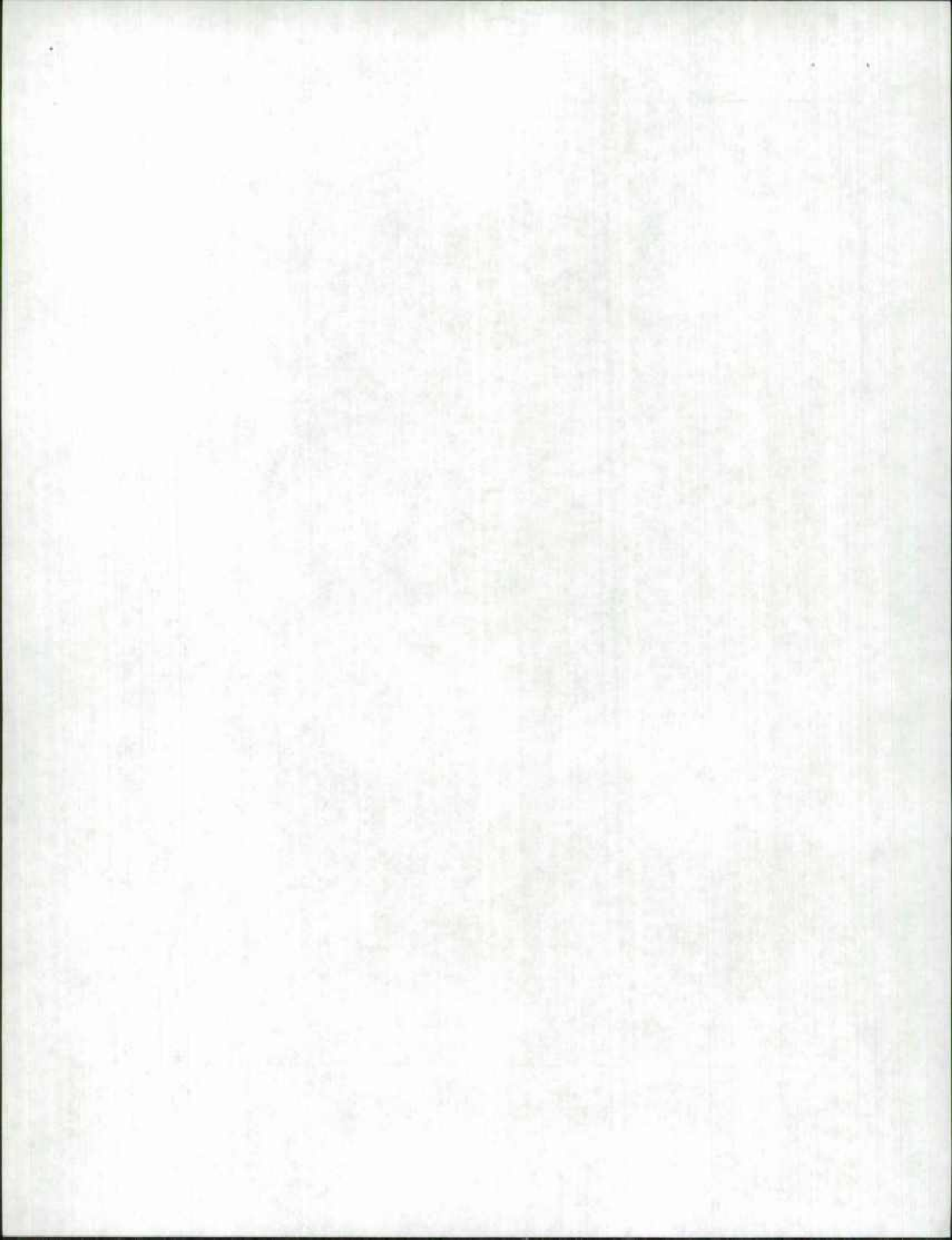
MILES POINT

THE MASTER PLAN DETAILS

Neighborhood General



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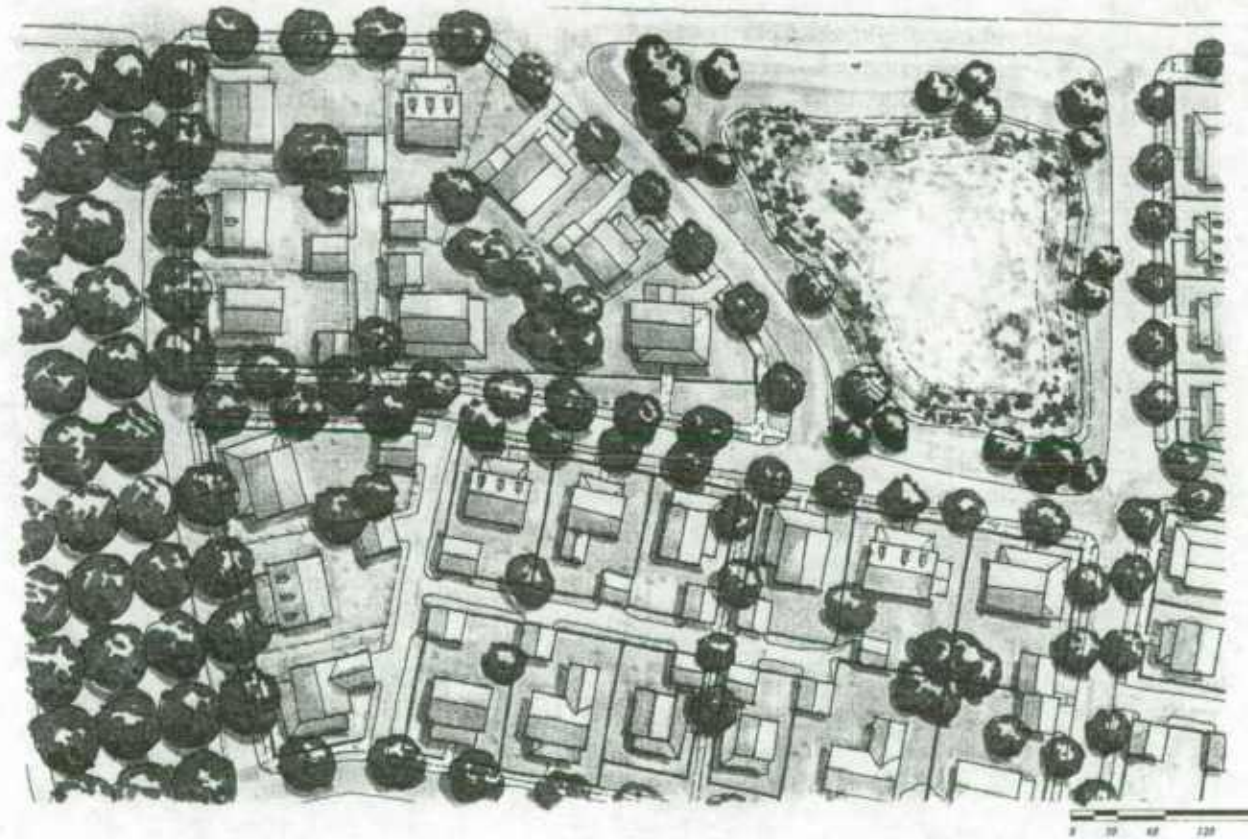


# Neighborhood Edge

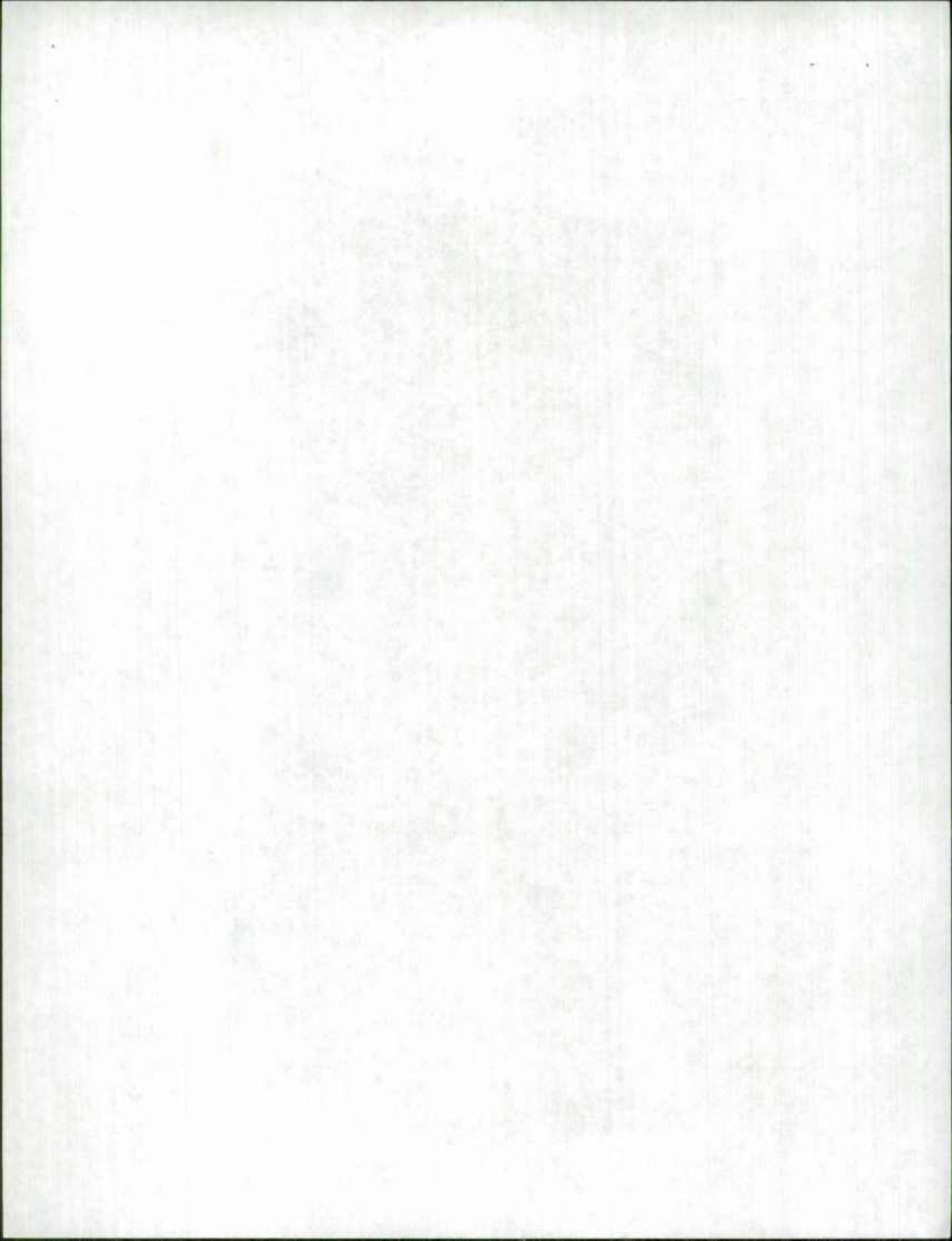
MILES POINT

THE MASTER PLAN DETAILS

Neighborhood Edge



© 1998 Henry Jones Architects & Planners





## **Stormwater Calculation Summary**

3.0 ac. of ponds shown on concept plan

### **Quantity Management**

2 year storm – 4.65 ac ft of storage required  
Requires an average ponding depth of 19 inches

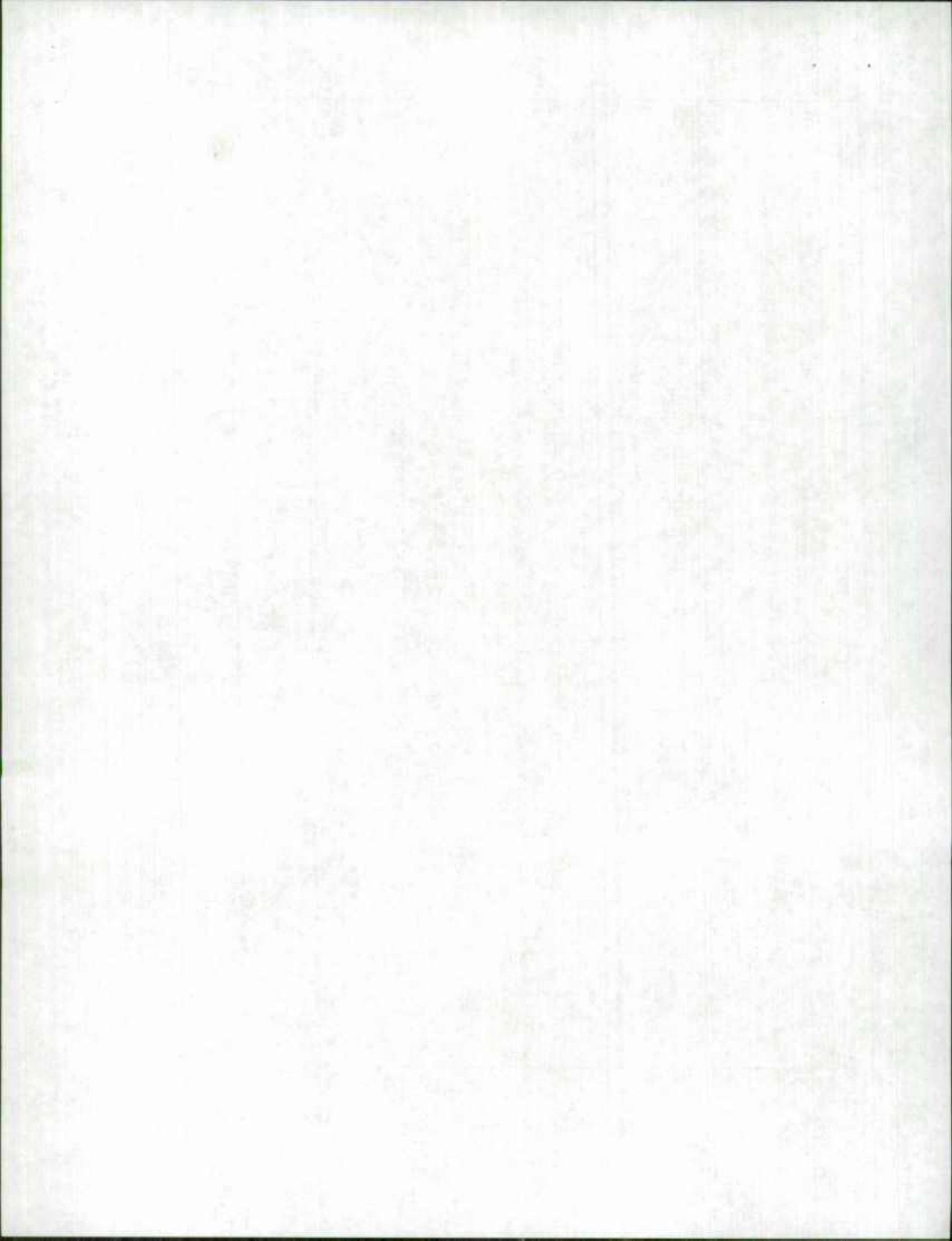
### **Quality Management**

2.84 ac ft of storage required  
Requires an average permanent pool depth of 12 inches

### **10% Calculations**

39.76 lbs/year pollutant removal required  
42.93 lbs/year provided with conceptual stormwater design

\*Calculations subject to change in conjunction  
with detailed engineering design



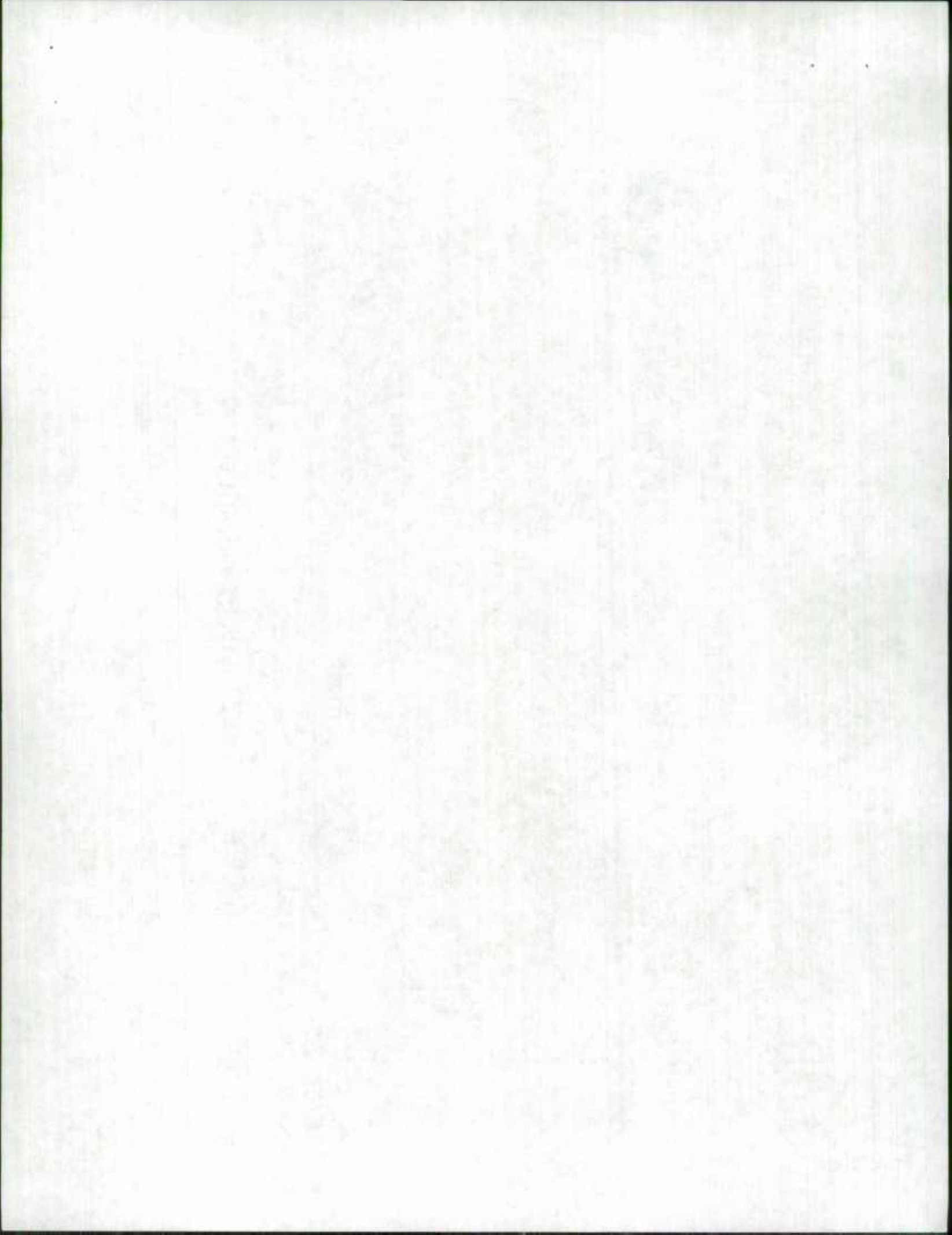


## Preliminary Impervious Surface Calculations for the Miles Point Development

5/10/2004

### Road Area Calculations

	Pavement Width	Linear foot of road	Sidewalk	Land cover	
RD-48-24	24	897.09	10765.08	32295.24	sf
RD-32-20	20	1854.19	9270.95	46354.75	sf
DR-37-24	24	4818.08	24090.40	139724.32	sf
ST-44-24	24	5228.71	52287.10	177776.14	sf
CS-56-28	28	735.03	13230.54	33811.38	sf
AV-100-36	36	265.88	3190.56	12762.24	sf
LA-15-4	4	5078.44	0.00	20313.76	sf
LA-24-12	12	1967.04	0.00	23604.48	sf
AL-24-12	12	1660.86	0.00	19930.32	sf
PS-18-0	0	3513.03	0.00	0.00	sf
				506572.63	sf
				11.629	acres





### Site Impervious area calculations

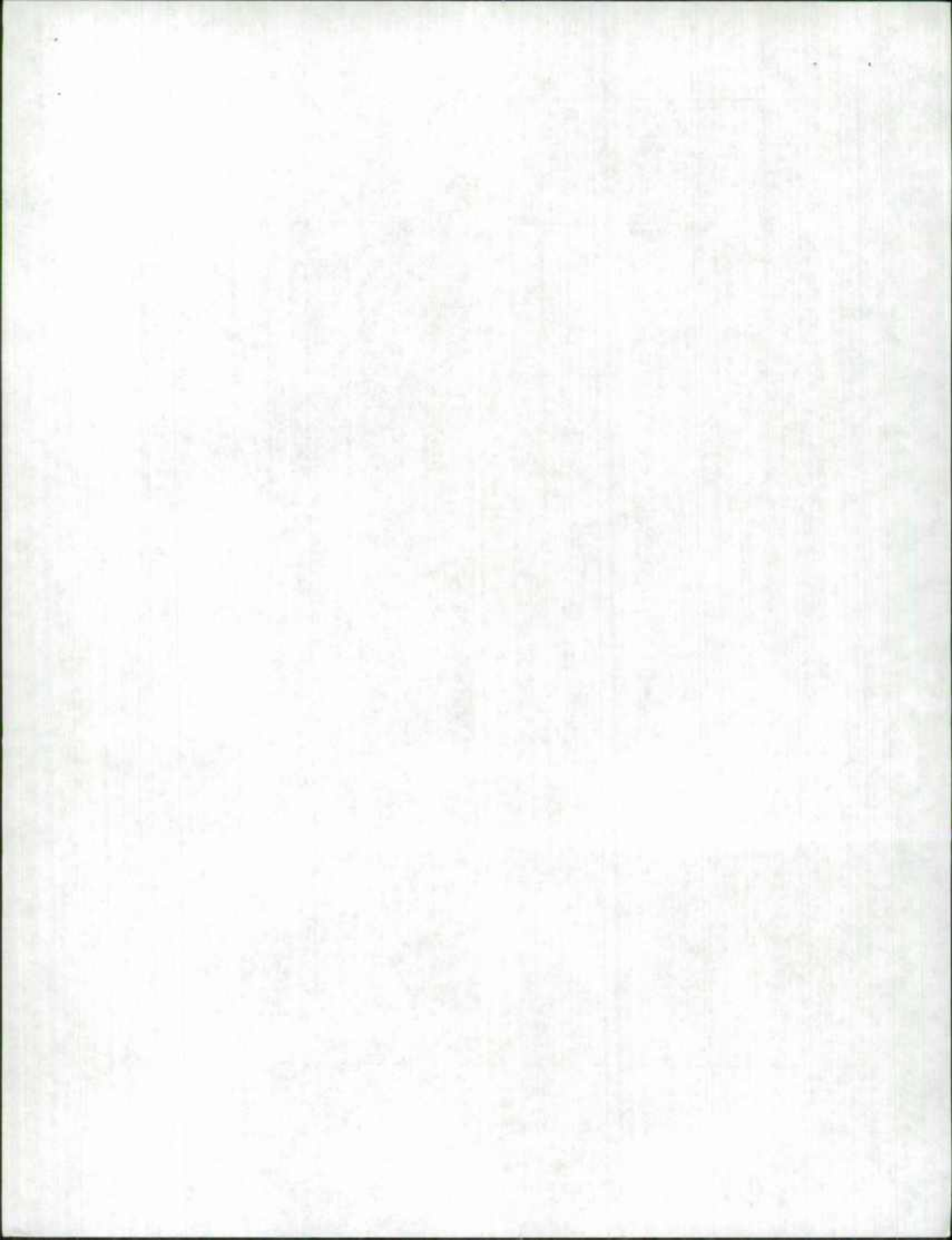
Total Site area	72.167	acres	
Less total openspace	16	acres	
	56.167	acres	
Less Roads	11.629	acres of impervious	1
equals land in private lots	44.538	acres	
utilizing conservative estimate of 50% on-lot imperv.*	22.269	acres of on lot impervious	
Take land in roads	11.629	ac	
and impervious on lot acreage	22.269	ac	
equals total impervious on site	33.898	ac	
divided by total site area of	72.167		
equals total on site impervious of	47%	impervious on site	

1) 11.167 acres of roads equates to 15.47% of the total site

Prepared by McCrone Inc.

The above are calculations prepared with the best available information.

During final engineering phases overall impervious calculations may vary slightly.

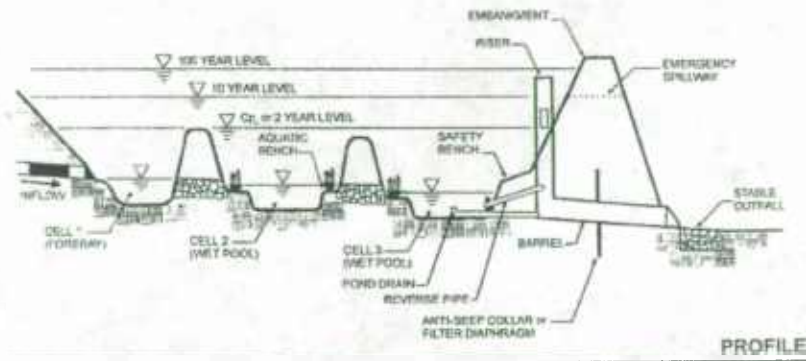
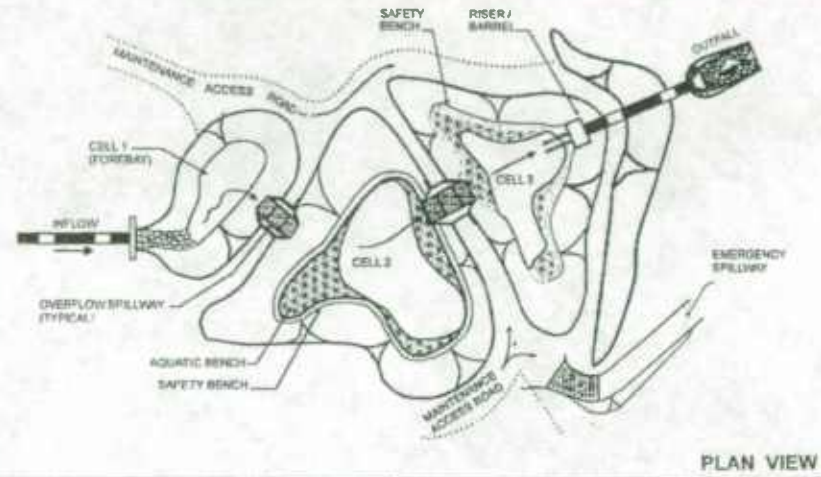




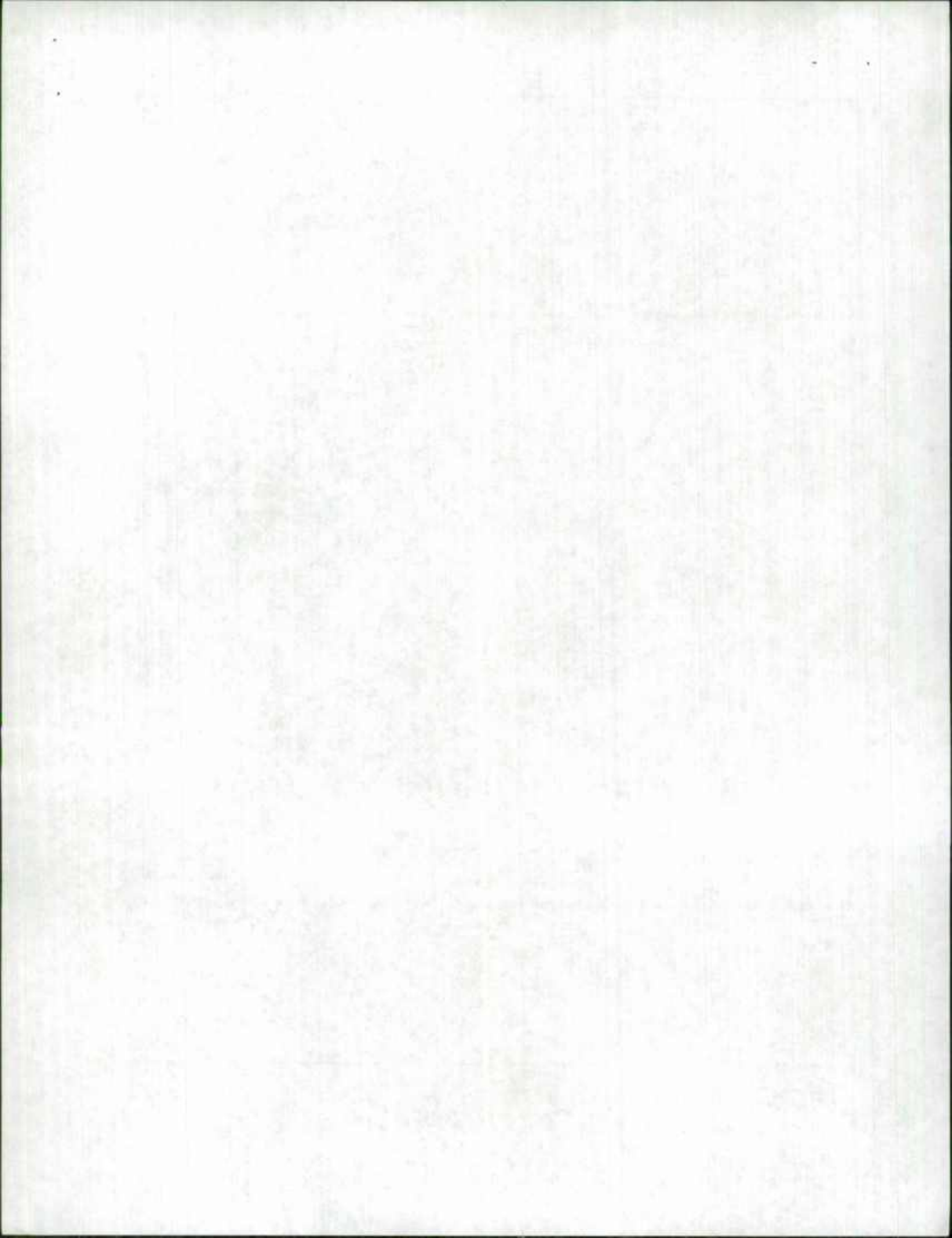
P-4

Figure 3.4 Example of Multiple Pond System

P-4



Multiple pond systems provide WQ<sub>v</sub> storage in two or more cells that create longer pollutant removal pathways.

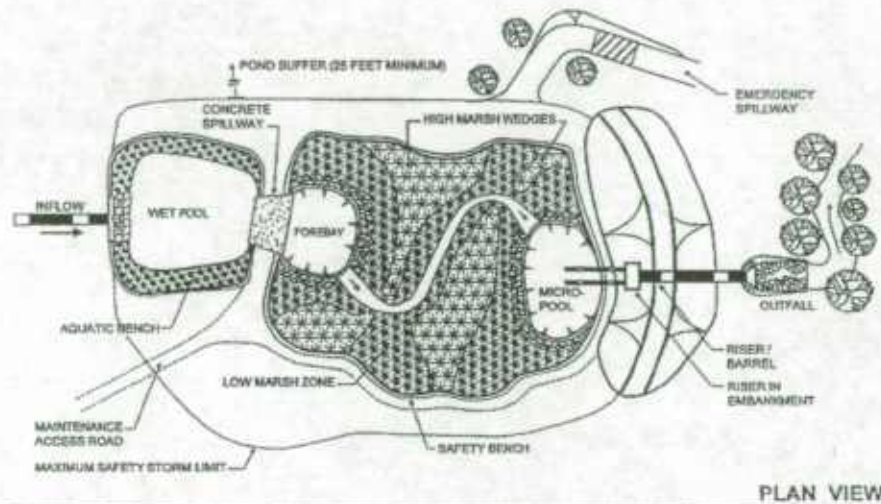




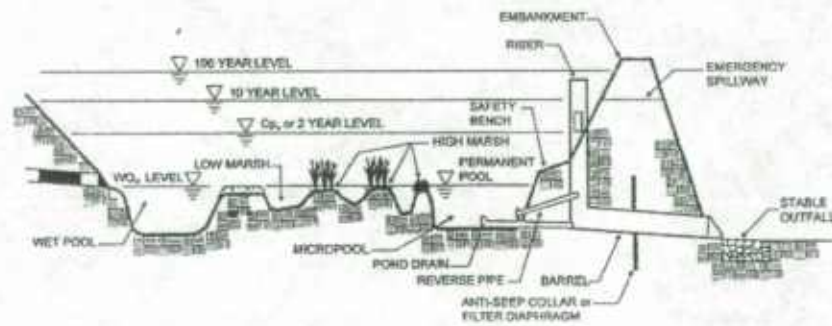
W-3

Figure 3.8 Example of Pond/Wetland System

W-3

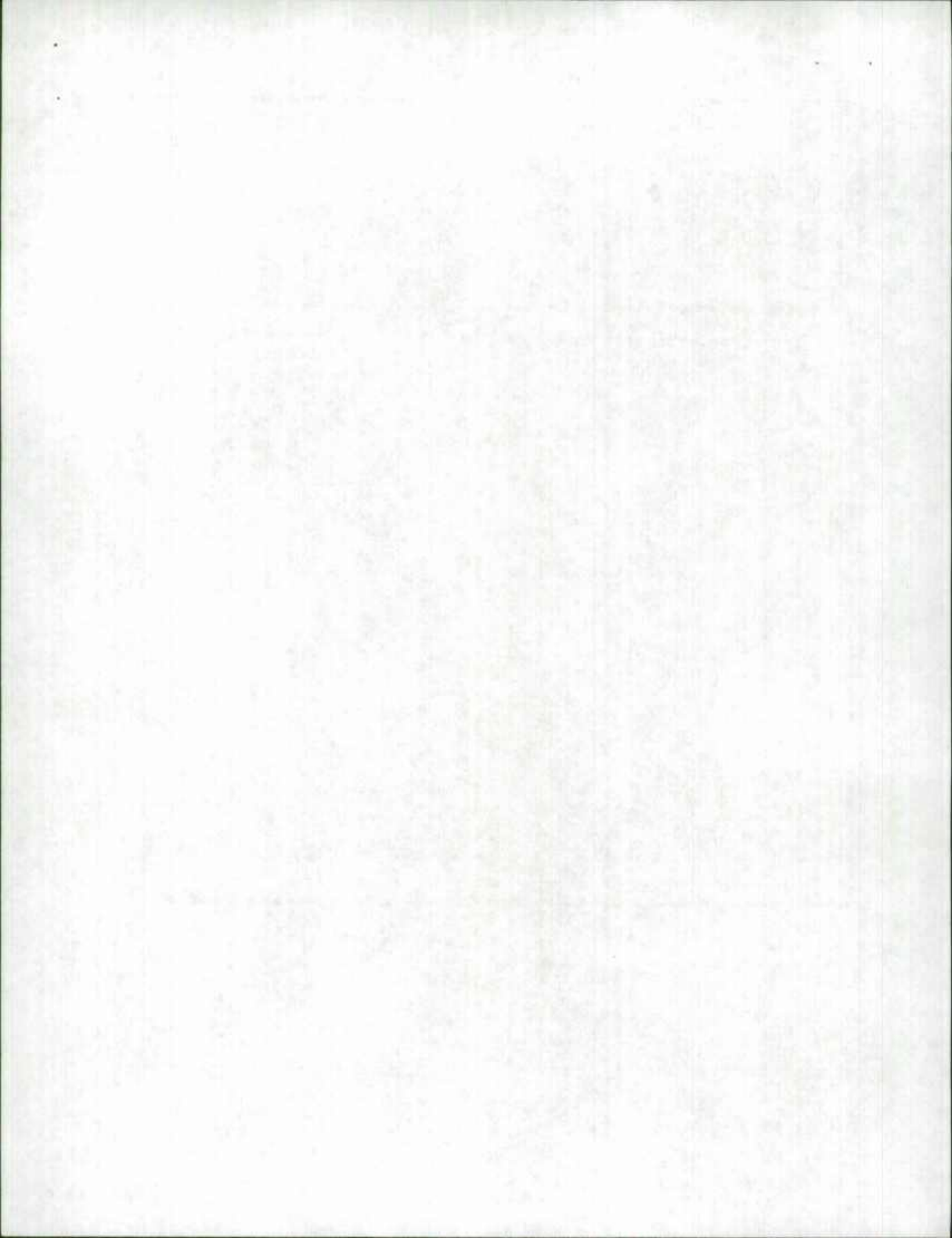


PLAN VIEW



PROFILE

In this BMP, a deep permanent pool is placed before the shallow wetland.

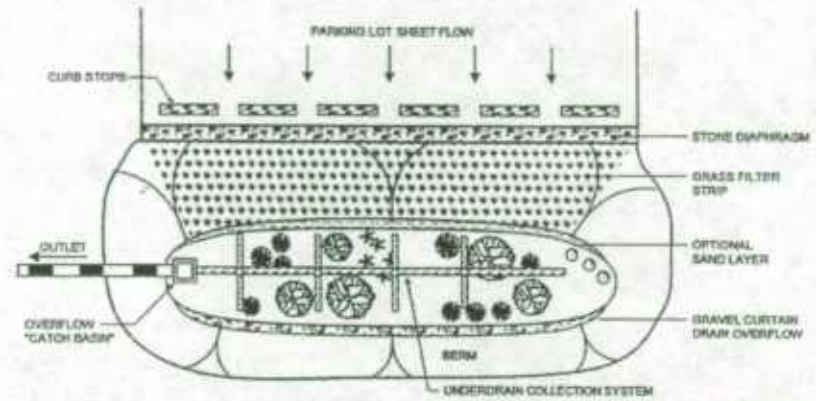




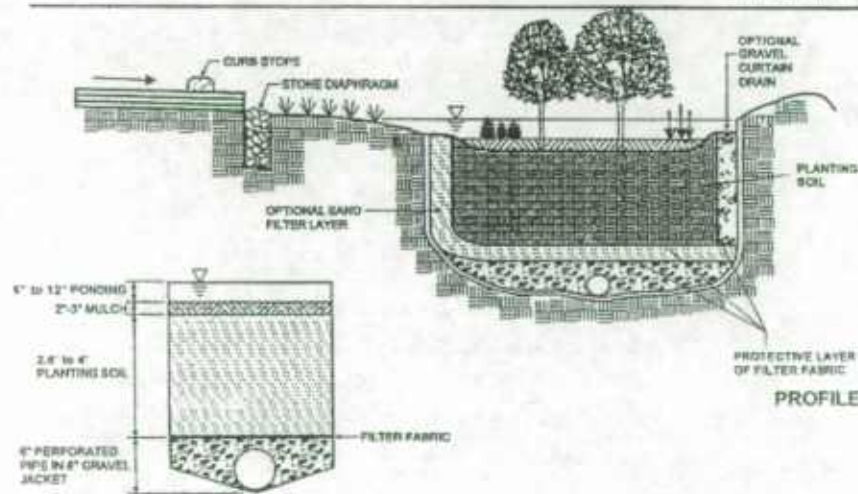
F-6

Figure 3.17 Example of Bioretention

F-6



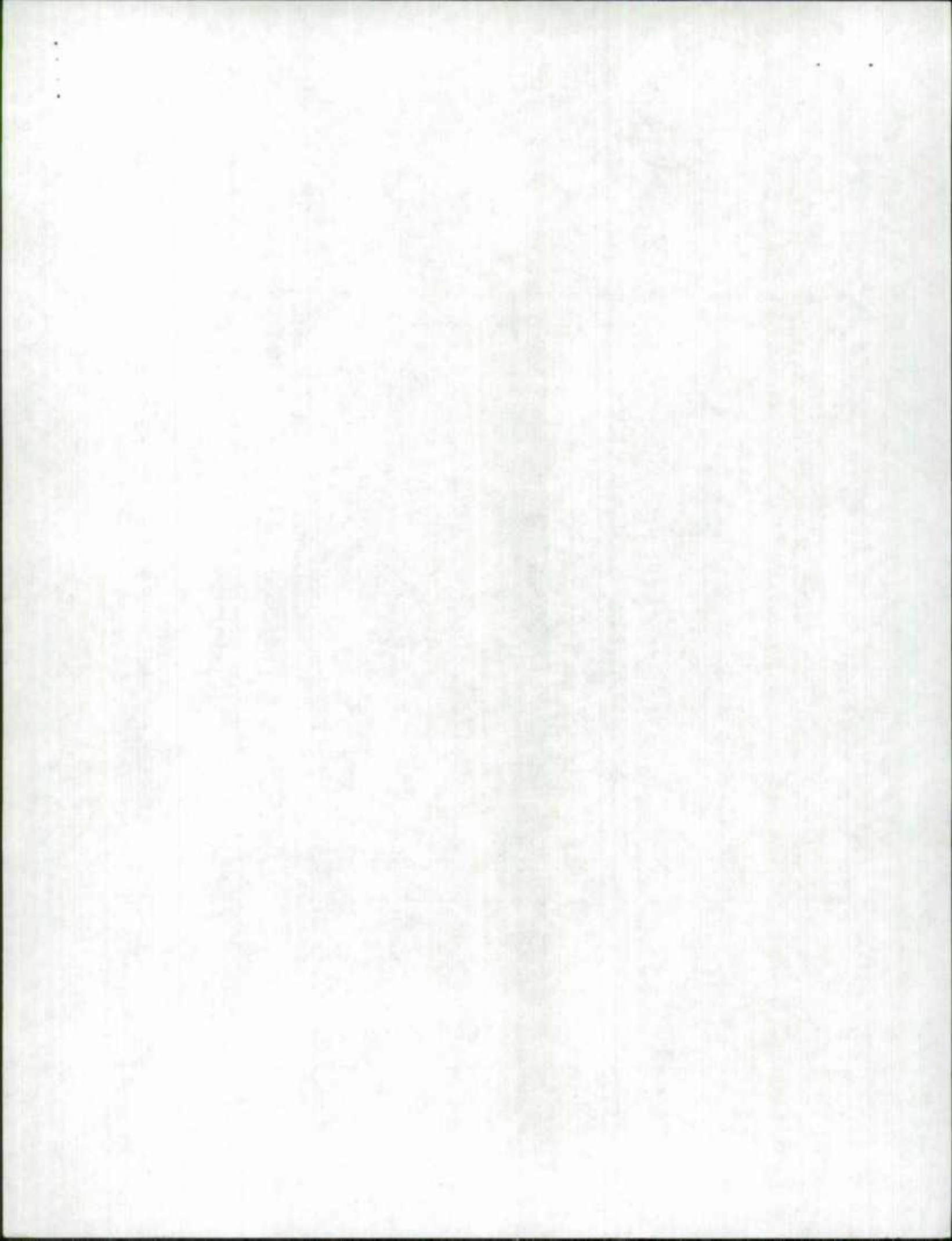
PLAN VIEW



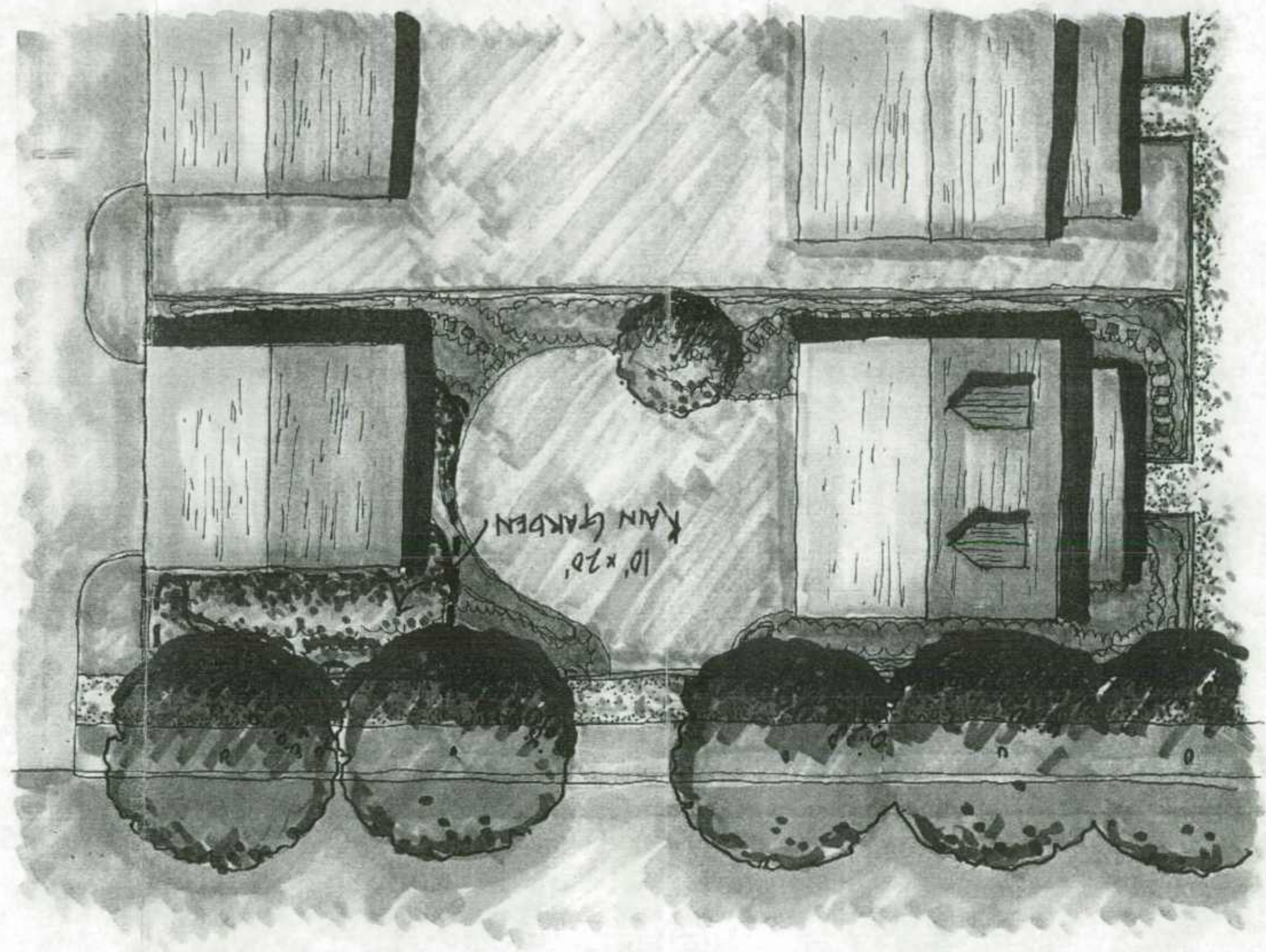
PROFILE

TYPICAL SECTION

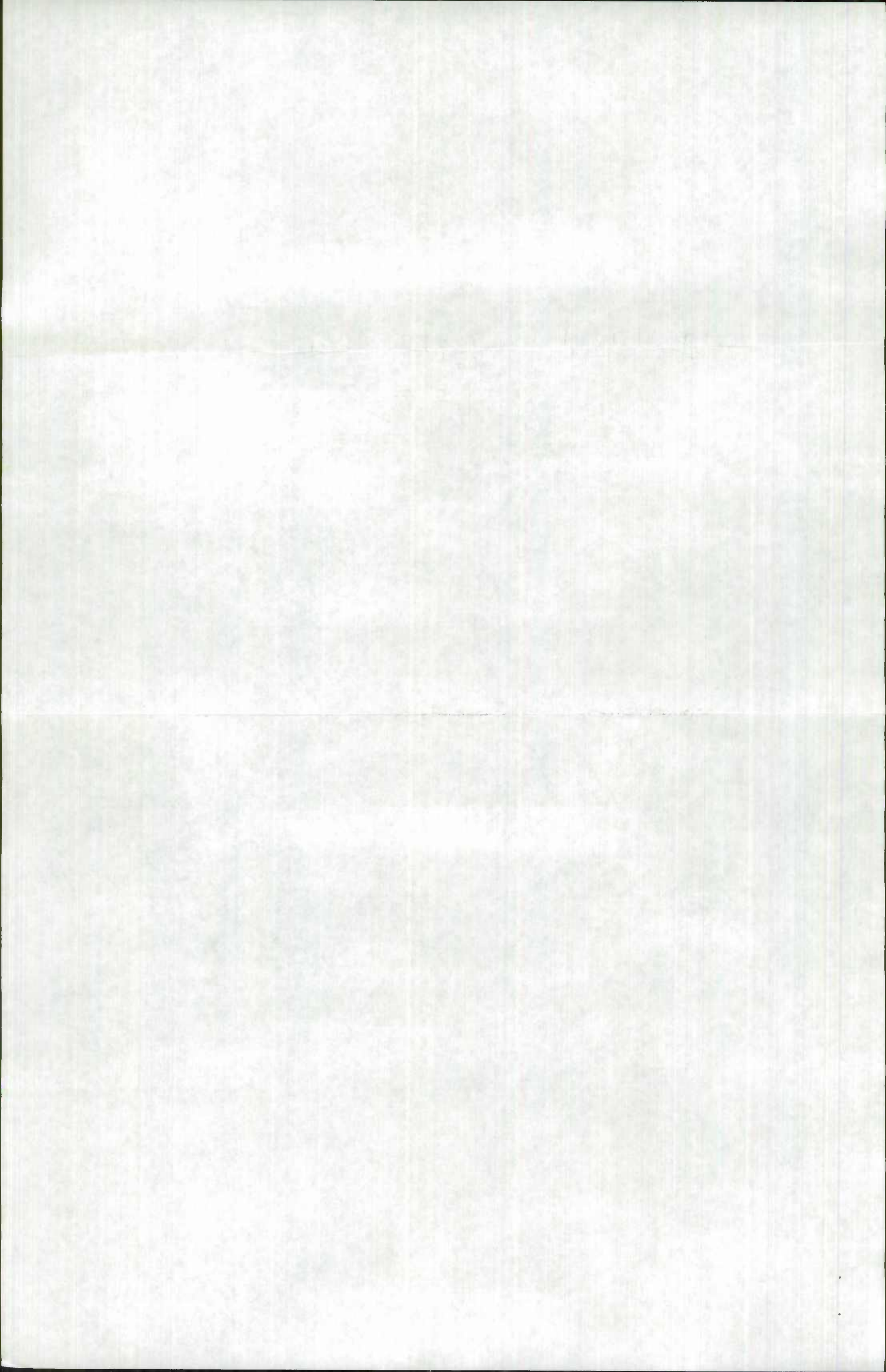
Bioretention combines open space with stormwater treatment.



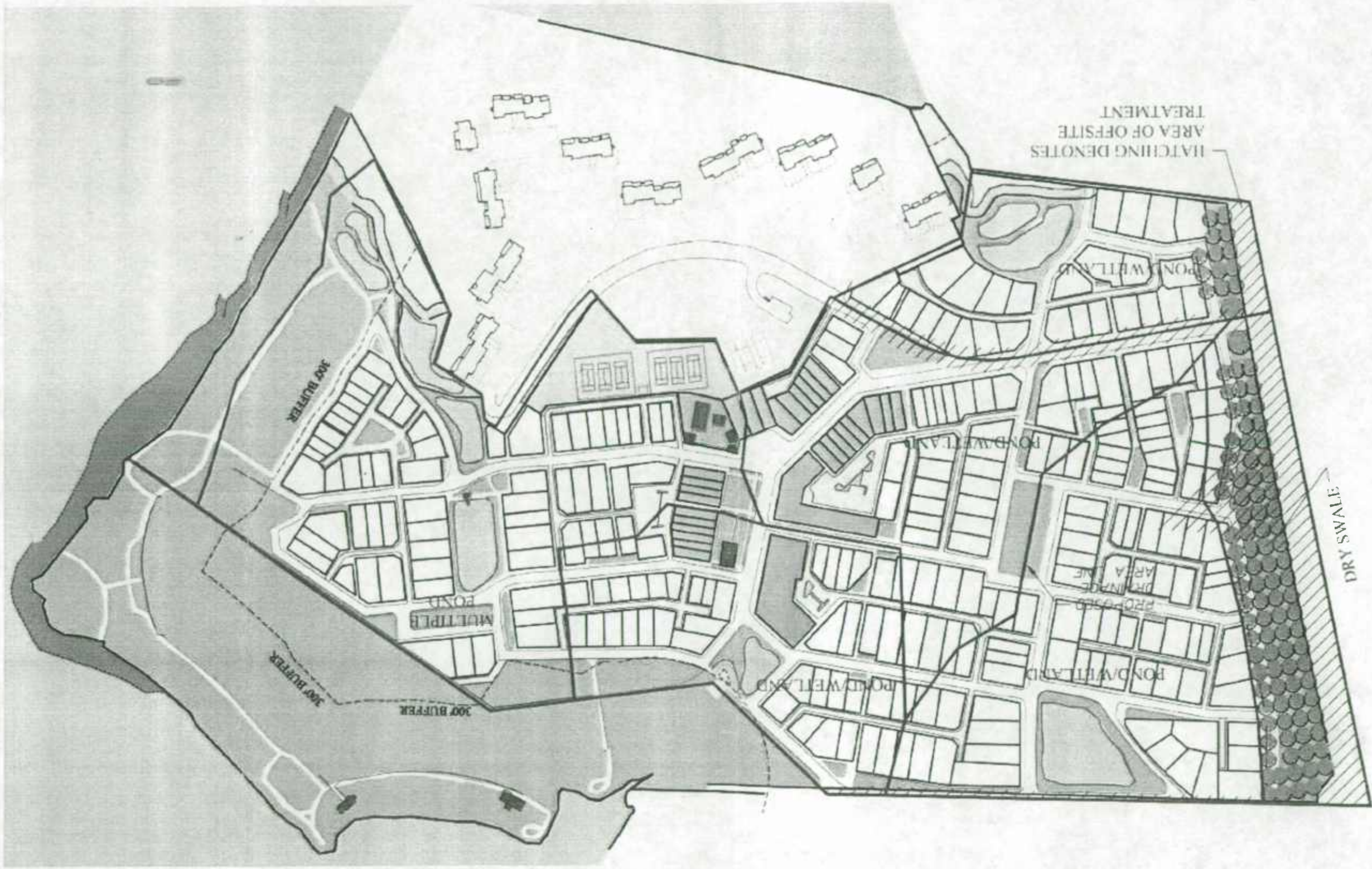












NOTES:  
1) BNP SELECTION AND DRAINAGE AREAS SUBJECT TO CHANGE IN CONJUNCTION WITH DETAILED ENGINEERING DESIGN.  
2) BUFFER ADJUSTMENTS WILL NOT AFFECT THE DESIGN OF STORMWATER MANAGEMENT FACILITIES



