

Chesapeake Bay Critical Area Commission
 Department of Housing and Community Development
 Crownsville, Maryland 21401
 Conference Room 1100A
 April 2, 1997
 AGENDA

2 tapes

SUBCOMMITTEES

10:00 a.m. - 11:00 a.m. Project Evaluation

Members: Langner, Bourdon, Giese, Goodman, Corkran, Foor, Blake, Cooksey, Hearn, Dietz

- MPA - Dundalk Marine Terminal Chromium treatment
- MPA - Hawkins Point Chromium treatment
- DGS - WWII Veterans Memorial
- DNR - North Point State Park Wildlands Trail
- DNR - Microwave Tower

11:00 a.m. - 12:00 a.m. Program Amendment

Members: Whitson, Evans, Moxley, Robinson, Myers, Barker, Williams, Curry, Foor, Pinto, Johnson, Lawrence, Taylor-Rogers, Duket, Wilde

Growth Allocation - Development Envelopes

12:00 p.m. - 1:00 p.m. - LUNCH

PLENARY MEETING

1:00 p.m. - 1:05 p.m.

Approval of Minutes
of March 5, 1997

Samuel Wynkoop

John C. North, II, Chair

Jerry Clark for J.L. Hearn - MDE
PROGRAM AMENDMENTS and REFINEMENTS

1:05 p.m. - 1:25 p.m.

VOTE - Calvert County Comprehensive Review Amendments

Dawn McCleary, Planner

1:25 p.m. - 1:35 p.m.

~~VOTE~~ - Calvert County Refinements *Concurrence*

Dawn McCleary, Planner

1:35 p.m. - 1:45 p.m.

Refinement - St. Mary's - Lacey Property - Growth Allocation

Mary Owens, Chief Program Amendments

1:45 p.m. - 1:55 p.m.

Refinement - Gardner's Place - Growth Allocation

Mary Owens, Chief Program Amendments

3 Talbot County Refinements
PROJECT EVALUATION

Greg Schaner, Planner

1:55 p.m. - 2:20 p.m.

VOTE / DNR Northpoint State Park Wildlands Trail

Susan McConville, Planner

2:20 p.m. - 2:30 p.m.

~~MPA - Dundalk Marine Terminal Chromium treatment/VOTE~~

~~Susan McConville, Planner~~

2:30 p.m. - 2:40 p.m.

~~MPA - Hawkins Point Chromium treatment/VOTE~~

~~Dawn McCleary, Planner~~

2:40 p.m. - 3:00 p.m.

DGS - WWII Veterans Memorial/VOTE

Lisa Hoerger, Planner

3:00 p.m. - 3:10 p.m.

DNR - Microwave Tower at North Point State Park/VOTE

Susan McConville, Planner

3:10 p.m. - 3:30 p.m.

Old Business

John C. North, II, Chair

New Business

John C. North, II, Chair

Chesapeake Bay Critical Area Commission
Department of Housing and Community Development
Crownsville, Maryland
March 5, 1997

The Chesapeake Bay Critical Area Commission met at the Department of Housing and Community Development, Crownsville, Maryland. The meeting was called to order by Chairman John C. North, II with the following Members in attendance:

Barker, Philip, Harford County
Blake, Russell, Worcester County
Bourdon, David G., Calvert County
Corkran, William, Talbot County
Dietz, Mary, Maryland Department of Transportation
Duket, Larry, Maryland Office of Planning
Evans, Diane, Anne Arundel County
Foor, Dr. James C., Queen Anne's County
Goodman, Robert, Md Department of Housing and Community Development
Giese, William, Dorchester County
Hearn, J. L., Maryland Department of the Environment
Langner, Kathryn, Cecil County
Lawrence, Louise, Maryland Department of Agriculture
Whitson, Michael, St. Mary's County
Williams, Roger, Kent County

The Minutes of February 5, 1997 were approved as read.

Dave Brinker, Department of Natural Resources, gave a slide presentation to the Commission on waterfowl and colonial nesting waterbirds in the Critical Area. The presentation was most informative and appreciated.

Lisa Hoerger, Environmental Specialist, CBCAC presented for concurrence with the Chairman's determination, a refinement of the Town of Vienna's Zoning Ordinance. This refinement is consistent with Senate Bill #657 which changed the impervious surface limitations on grandfathered lots under one acre.

Regina Esslinger, Project Division Chief, CBCAC presented for VOTE the Tribonian Drive water and sewer extension project proposed by WSSC in Prince George's County. This project is in a new residential community. All work will be done within the road right-of-way, and sediment control measures will be installed and then monitored during inspection. There is no disturbance in the Buffer or any other habitat protection areas. Kay Langner moved to approve the Tribonian Drive project for water

and sewer extension of WSSC. The motion was seconded by Bill Corkran and unanimously carried.

Greg Schaner, Planner, CBCAC presented for VOTE the Second Quadrennial Review for Dorchester County. The County Commissioners approved all the proposed changes contingent upon approval by the Chesapeake Bay Critical Area Commission. The proposed revisions will affect the Grading and Erosion Control Ordinance, Forestry Ordinance, and Zoning Ordinance. The proposed changes to the Program are 1) incorporation of updated changes (additions and deletions) to mapped eagle nests, colonial nesting birds, and Natural Heritage Area sites in the County; 2) incorporation of regulatory language covering the "10 percent rule" for IDA development and redevelopment, dog kennels in the RCA, impervious surface restrictions, mitigation ratio for Buffer impacts, shoreline access restrictions, and Buffer establishment requirements for agricultural rezonings; and 3) inclusion of new Buffer Exemption Areas. A modification to the Buffer Management Plan provisions is also proposed which will strengthen the protection of forest vegetation in the Buffer and clarify when property owners are required to submit a Buffer Management Plan. Regulatory language in the Zoning Ordinance was placed in new sections of the Grading and Erosion Control Ordinance, and a provision from the State Criteria relating to Buffer Management Plans for timber harvests was incorporated into the forestry Ordinance. There have been no major changes in forest resources which need to be updated on the Critical Area Inventory Maps and no growth allocation requests or approvals since the first comprehensive review. Karen Houtman, Planner for Dorchester County Planning and Zoning, reviewed for the Commission the proposed changes to the Program. Russell Blake moved, on Panel recommendation, to approve the Dorchester County four-year comprehensive review amendments. The motion was seconded by Bill Corkran and unanimously carried.

Dawnn McCleary, Planner, CBCAC presented for VOTE the Maryland Port Administration's (MPA) proposal for constructing a fabric warehouse building at area 201 at Dundalk Marine Terminal in Baltimore City. The construction will be partially within IDA, a 100,000 square foot fabric building on existing pavement, which will be moved within three years to another location. There will be no increase in quantity of runoff and quality of runoff will not be lessened. Plant and wildlife habitats should not be affected and there are no known threatened or endangered plant or animal species in the area. MPA has sediment and erosion control approval from MDE. The 10% calculation will not be able to be achieved onsite, although the Port Administration would like to do onsite mitigation at another location. Bioretention has been recommended near the site of the guard station instead of vegetative planting. Mr. Vasanth, MPA, was on hand to answer any questions about the project. Kay Langner

moved to approve the Dundalk Marine Terminal Project contingent upon the inclusion of bioretention to be incorporated into the landscaping. The motion was seconded by Diane Evans and unanimously carried.

OLD BUSINESS

There was no old business reported.

NEW BUSINESS

Ren Serey, Executive Director, CBCAC told the Commission that the Program Subcommittee met to discuss an interpretation of the Criteria (COMAR 27.01.02.02G) that states "certain new facilities are not permitted" in regard to a proposal by Mr. William Blanchett, Anne Arundel County, for a transfer station. He said that Commission Staff, at the request of the County, reviewed for interpretation this section of the Criteria and subsequently forwarded a recommendation to the Program Subcommittee that this transfer station facility, although not listed specifically in the Criteria, was covered under the "umbrella" regulation for solid waste collection or disposal facility. The Program Subcommittee endorsed this interpretation of the Criteria. In this particular station, solid waste would be brought in, recyclable elements of it would be separated out and material would be removed by rail or truck. The process would be conducted entirely within an existing building. This would operate under permits of the Department of Environment. Mr. Serey stated that Anne Arundel County will be advised that this facility, as proposed by Mr. Blanchett, is covered under the provision for solid waste collection or disposal in the Criteria for this type of transfer station.

Marianne Mason, Assistant Attorney General, DNR and Commission Counsel, updated the Commission on legal matters. She said that she has filed two Appeals Memoranda in Anne Arundel Circuit Court. Both cases involve accessory, non-water dependent structures in the Buffer - one a pool and one a gazebo. She told the Commission that the Commission Staff has testified before the Anne Arundel County Board of Appeals for a variance involving a structure in the Buffer. Additionally, she reported that there are three hearings scheduled for March.

There being no further business, the meeting adjourned.

Minutes submitted by:
Peggy Mickler, Commission Secretary

W. Whitson - motion to approve
of CAMA - 16-97

sub to
approval by ADE

D. Evans - sec -

Chesapeake Bay Critical Area Commission

STAFF REPORT
FINAL
April 2, 1997

Concurrence

*D. Boudon -
96-5 Amend to motion
as amended
e/c*

PROPOSAL: Four (4) Year Comprehensive Review
Package of Refinements to Calvert County's
Critical Area Program

JURISDICTION: Calvert County

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Approval

STAFF: Dawnn McCleary

APPLICABLE LAW
REGULATION: NRA §8-1809(h)

DISCUSSION: There are a total of 14 text refinements that were separated out from the proposed amendments and are being recommended by County staff as refinements. These proposed text refinements includes changes to Calvert County's Zoning Ordinances that includes: forest and woodlands, conservation districts, growth allocation, water dependent activities as well as other miscellaneous issues.

I. Forest and Woodlands -

CATA 96-2: Revision of "Forest " and Developed Woodland" definition in
Program to agree with Zoning Ordinance

County Proposes: This amendment will bring Part I, Plan section into agreement with
the County's Zoning Ordinance.

Continue, Page Two
Calvert County Comprehensive Review
Final Refinements
April 2, 1997

CATA 96-3: Clarification of clearing limitations and reforestation requirements in the Limited Development Area (p.1)

County Proposes: The County feels that this revision will provide a more comprehensible description of forest clearing limitations within the LDA and adds a stricter penalty for violations.

CATA 96-7: Revise list of recommended species for reforestation

County Proposes: The County is revising this list for Critical Area Commission consistency.

CATA 96-8: Revise forest planting proposal for reforestation

County Proposes: Revising "Forest Planting Proposal" form to such areas as lot, block, and section, septic recovery area, location of waterways and wetlands, etc.

CATA 96-9: Revise the Critical Area Reforestation site guidelines and Critical Area Reforestation application

County Proposes: The County wants to revise reforestation guidelines and application to make them read better . Also the County wants to allow planting of small stock for saplings to reduce costs.

Continue, Page Three
Calvert County Comprehensive Review
Final Refinements
April 2, 1997

Conservation Districts -

Wetlands

CATA 96-10: The County proposes revisions to wetlands regulations to establish identical criteria for development both within and outside the Critical Area.

County Proposes: Because of the change in State Law, MDE has taken over authority in wetland regulation. This revision will remove wetlands in the County's Zoning Ordinance.

CATA 96-11: Clarification of activities allowed within the buffer and which activities require permits.

County Proposes: The County proposes to amend this section to allow for the removal of vines that impair tree growth and limits clearing of under story.

CATA 96-12: Grading in the buffer amendments

County Proposes: Grading in the buffer without tree removal does not currently require a permit though sediment in the buffer could easily reach the waterways causing sediment pollution. Because of this the County is proposing to amend its zoning ordinance.

CATA 96-14: Clarification of fees-in-lieu for buffer clearing

County Proposes: The County proposes to revise their Conservation Manual to agree with Zoning Ordinance.

Continue, Page Four
Calvert County Comprehensive Review
Final Refinements
April 2, 1997

CATA 96-15: The County is revising their "Procedures for Shore Erosion Protection Measures" in their program.

County Proposes: This provision allows for cutting of trees in the buffer along shoreline if they shade marsh plantings which were installed for shore erosion control.

CATA 96-18: The County is proposing procedures for State Listed Species Sites (SLSS)

County Proposes: The County has no State Listed Species Sites when the original program was adopted. The County's amendment adds procedures for proposed development in these areas.

Growth Allocation

CATA 96-27: Growth Allocation update

County Proposes: The County is providing an update on past uses of growth allocation.

Water Dependent Activities

CATA 96-29: Clarification of number of boat slips allowed at community piers, House Bill 362

County Proposes: The County is adding provisions of House Bill 362, which removes moorings buoys from Critical Area jurisdiction, without changing the number of boat slips allowed at individual piers or allowing more than currently allowed at community piers.

Chesapeake Bay Critical Area Commission

STAFF REPORT

Vote

April 2, 1997

PROPOSAL: Four(4) Year Comprehensive Review
Package of **amendments** to Calvert County's
Critical Area Program

JURISDICTION: Calvert County

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Approval

STAFF: Dawnn McCleary

**APPLICABLE LAW/
REGULATION:** NRA §8-1809(g)

DISCUSSION: There are a total of 14 text amendments and 7 map amendments being recommended by Calvert County Board of County Commissioners. The amendments are to their Critical Area program that were not part of the refinement package. The proposed text amendments involve changes to Calvert County's Zoning Ordinances that includes: forest and woodlands, conservation districts, Critical Area preservation programs, cliff policy task force recommendations, resource conservation areas and growth allocations. The map amendments include: the addition of state listed species sites, the mapping of waterfowl staging and concentration areas, establishment of buffer exemption for a subdivision, establishing a sending and receiving areas for Critical Area Transfer Development Rights, Critical Area line amendments, and designation change from RCA to LDA.

I. Forest and Woodlands -

CATA 96-1 Amendment to Critical Area Program regarding reforestation program

County proposes: The County is proposing to amend their Critical Area program regarding reforestation by adding a new section to explain the reforestation program and its accomplishments. It states that the County is exceeding its 100 % replacement goal.

CATA 96-4 Establishment of priority schedule for afforestation and reforestation

County Proposes: The County is establishing a priority schedule for afforestation and reforestation which outlines areas which will be required to be revegetated first, when reforestation is required. The priority schedule is: 1.) buffers adjacent to tidal and nontidal wetlands and waterways; 2) eroding or destabilized areas; and 3) slope 15% or greater.

CATA 96- 5 Reforestation Requirements for Utility Corridors, Percolation Tests
Access and Percolation Tests

County proposes: The County is establishing reforestation language for utility corridor, percolation tests access and percolation test. The proposed amendment allows minimal necessary clearing for these necessary activities without reforestation requirements.. This amendment also sets reasonable limits so that this provision is not abused.

CATA 96- 6 Allowance for reforestation with seedlings on tracts of 0.5 acres or more,
And revision of survival rate requirements

County proposes: The County is establishing an allowance for reforestation with seedlings on tracts of 0.5 acres or more and revision of survival rate requirements. Seedlings may only be used at the recommendation of the Bay watershed forester.

II. Conservation Districts -

Buffers

**CATA 96-13 Clarification of impervious surface allowed within Buffer
Exemption Areas**

County Proposes: The County is revising their existing zoning ordinance to include clarification of the impervious surface allowed within buffer exemption area. This revision removes impervious surface restriction in the buffer exemption area that expansion or redevelopment of existing structures not exceed a 25% increase in the total site area in impervious surfaces within the Buffer Exemption Area.

Forest Interior Dwelling Bird Habitat

CATA 96-16 Forest Dwelling Bird Habitat Protection

County Proposes: The County is amending their zoning ordinance to include Forest Interior Dwelling Bird Habitat language. This language removes requirements for mapping Forest Interior Dwelling Bird Habitat and relies on definition and identification during development process.

Colonial Water Bird and Waterfowl Staging and Concentration Areas

CATA 96-17 Procedures concerning Waterfowl Staging and Concentration Areas

County Proposes: The County is adding a new section that would establish procedures for Colonial Water Bird and Waterfowl Staging and Concentration Areas. The County feels that the Habitat Protection Plan would no longer be required by Calvert County water related activities in these designated areas unless the State or federal permitting agency determined that a proposed development activity might have a negative impact on one of these Habitat Protection Areas. In such a case, the agency will require a local habitat protection plan.

III. Critical Area Preservation Program -

CATA 96-19 Amendments to Critical Area Program regarding the Critical Area Preservation Program

County Proposes: The County is adding a new section by creating amendments to Critical Area Program regarding the Critical Area preservation program. The additions include the description of the proposed program, including Critical Area Program Transfer Development Rights, to the plan section. The CA Preservation Program using Critical Area Transfer Development Rights is intended to preserve sensitive areas by encouraging the sending of development rights out of certain areas to elsewhere in the Critical Area.

CATA 96-20 Establishment of the Critical Area Preservation Program Regulations

County Proposes: This section deals with the establishment of the Critical Area Preservation Program by adding new regulations for the Critical Area Preservation Program including criteria for sending and receiving Critical Area Program, Transferable Development Rights. Sending Areas are restricted to designated Category 1 Areas (See Cliff Category Map), the Critical Area portion of the Parkers Creek Watershed, or certain portions of Plum Point Creek Watershed. A sending area must have the potential to be developed. Potential receiving areas are within the RCA and have either a rural community overlay (rural zoning), R-1 zoning or are in Chesapeake Beach or North Beach.

CATA 96-21 Procedures for Critical Area Preservation Program

County Proposes: The County is adding a new chapter describing procedures for the County's Critical Area Preservation Program by outlining Procedures for using Critical Area Program-Transferable Development Rights to the Conservation manual.

Cliff Policy Task Force Recommendations -

CATA 96-22 Revision of the "Cliff Preservation and Shore Erosion Protection Program

County Proposes: The County is revising the cliff preservation and shore erosion protection program plan section to reflect proposed changes in cliff preservation and in development regulations along the cliffs. The major objective is to preserve certain portions of the shoreline and cliffs of Calvert County for future generations. A priority order is listed if shore erosion is needed. Erosion Control measures should be considered in the following order of preference: 1) no action, 2) relocation of threatened structures, 3) non-structural stabilization including beach nourishment, slope grading and march creation, 4) 4) shoreline revetments, 5) offshore breakwaters, 6) groins, 7) bulkheads.

CATA 96-24 Revision of the "Building Permits Required" section in Zoning Ordinance to reflect the Cliff Policy Task Force recommendations.

County Proposes: The County is revising their "Cliff" definition in their zoning ordinance to reflect the Cliff Policy Task Force recommendations. Due to the impervious surface restrictions in the Critical Area and the environmentally sensitive nature of buffer Areas, permits would be required.

IV. Resource Conservation Areas

CATA 96-26 Clarification of expansion of uses in the Resource Conservation Area

County Proposes: The County is amending their zoning ordinance to clarify the expansion of uses in the Resource Conservation Area. A phase is added that existing industrial commercial and institutional uses maybe expanded or intensified only if the criteria for development In the RCA has been met.

Continued, Page Seven
Calvert County Comprehensive Review
Final Amendments
April 2, 1997

V. Growth Allocation

CATA 96-28 Growth Allocation Policy Amendment

County Proposes: The County is changing their zoning ordinance to amend their growth allocation policy. To be consistent with the Commissions amendments to its growth allocation policy regarding new IDA's.

VI. MAP AMENDMENTS

Conservation Districts - State Listed Species Sites

CAMA 96 - 1 : The County is proposing to add State Listed Species on a portion of Graham Creek wetlands.

Waterfowl Staging and Concentration Areas

CAMA 96-3: The County is mapping waterfowl staging and concentration areas as new habitat protection areas.

Continued, Page Eight
Calvert County Comprehensive Review
Final Amendments
April 2, 1997

Buffer Exemption Area

CAMA 96-4: The County is establishing Patuxent View as a Buffer Exemption Area

County Proposes: The County has proposed that the subdivision of Patuxent View be buffer exempted. According to the County, this an old subdivision created and mostly developed prior to the Critical Area Law. The County feels that this subdivision does not have a functioning buffer.
(See color photographs)

Critical Area Preservation Program -

CAMA 96-5: The County is proposing to establish and mapped out sending and receiving areas for Critical Area Transfer Development Rights.

Cliff Policy Task Force Recommendations

CAMA 96-6: The County is proposing to add overlay on cliff front properties of Categories I, II, III for cliff preservation.

County Proposes: The overlays have been done on maps of Categories I & II. All other unmapped areas qualifying as cliffs would be considered in the Category III overlay.

Continued, Page Nine
Calvert County Comprehensive Review
Final Amendments
April 2, 1997

Cove Lake

CAMA 96-7: The County is proposing to amend the Critical Area line in an area of Cove Lake. It is based on an error in the States title wetland maps.

County Proposes: A report from the County's Dept. of Public Works demonstrates that Cove Lake is vertically separated from tidal influence by a rise. It cannot be considered tidal any more. The County wants 35 acres to be removed from the Critical Area. MDE agrees with the findings and will hold a public hearing to change the tidal wetland maps.

Brooms Island -

CAMA 96-9: The County is proposing a designation change from RCA to LDA for Parcel 4, Tax Map 41, Brooms Island.

County Proposes: During the original establishments of the overlays, there was some difference of opinion between the County and the State as to whether the R-1 areas of Brooms Island should be designated as LDA or RCA. The map used to do the overlay was out of date and did not show Lot 4 of Tax map 41 which had previously been recorded.

Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

Concurrence

APPLICANT: St. Mary's County Board of County Commissioners

PROPOSAL: Growth Allocation Request for Lacey Property

COMMISSION ACTION: Concurrence with Chairman's Determination

STAFF RECOMMENDATION: Approval

STAFF: Mary Owens

**APPLICABLE LAW/
REGULATIONS:**

COMAR 27.01.02.06 - Location and Extent of Future Intensely Developed and Limited Development Areas
Natural Resources Article, Section 8-1808.1 - Growth Allocation in Resource Conservation Areas

DISCUSSION:

The Board of County Commissioners of St. Mary's County is requesting 1.5 acres of growth allocation for a single lot subdivision near St. Clement's Bay in Oakley, Maryland. This property was subdivided by deed in 1981. This property is one of many lots in St. Mary's County that was created without formal subdivision review and approval; therefore, the property is not currently a legal parcel of record. County staff are attempting to correct numerous parcel of record issues by working with property owners to obtain "after-the-fact" subdivision approval and to record appropriate plats. Growth allocation is necessary in order to correct the parcel of record issue on this property because the property is only 1.5 acres in size and can not meet the one unit per 20 acre density for Resource Conservation Areas.

This property is currently maintained as a mowed lawn with some landscape plantings. The property is improved with a septic system and a 60-foot long pier. There is currently no forest cover on the property, so afforestation will be required when the property is developed.

The only Habitat Protection Area on the site is the 100-foot Buffer. The Buffer will be established in vegetation using native species. There are no known threatened or endangered plant or animal species, steep slopes, tidal wetlands or streams on the property.

The proposed growth allocation request is consistent with the Commission's policies regarding growth allocation. The remainder of the parent parcel is approximately 95 acres which will remain RCA, therefore allowing the "development envelope" approach to be used in calculating the proposed 1.5 acre deduction. Although the project is not located adjacent to an area currently designated as LDA or IDA, Commission staff support the growth allocation request because of the County's need to correct the parcel of record issue.

The County Commissioners approved the award of growth allocation for this project on March 11, 1997. In recommending the project for an award of growth allocation, the Board of County Commissioners recognized that a text amendment to the County's zoning ordinance will be necessary to remove a minimum six (6) acre tract size requirement for single lot growth allocation requests. The County plans to accomplish this text amendment during the four year comprehensive review which is currently underway. The County currently has 1607.21 acres of growth allocation remaining. If the two requests being considered at this time are approved, then 1587.94 acres will be available for future allotment.

Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

Concurrence

APPLICANT: St. Mary's County Board of County Commissioners

PROPOSAL: Growth Allocation Request for Gardiner's Place Subdivision

COMMISSION ACTION: Concurrence with Chairman's Determination

STAFF RECOMMENDATION: Approval

STAFF: Mary Owens

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.01.02.06 - Location and Extent of Future Intensely Developed and Limited Development Areas
Natural Resources Article, Section 8-1808.1 - Growth Allocation in Resource Conservation Areas

DISCUSSION:

The Board of County Commissioners of St. Mary's County is requesting 17.77 acres of growth allocation for a nine lot clustered subdivision on the Patuxent River in California, Maryland. The remainder of the parent parcel (40.27 acres within the Critical Area) will be divided into two large lots, of approximately 20 acres.

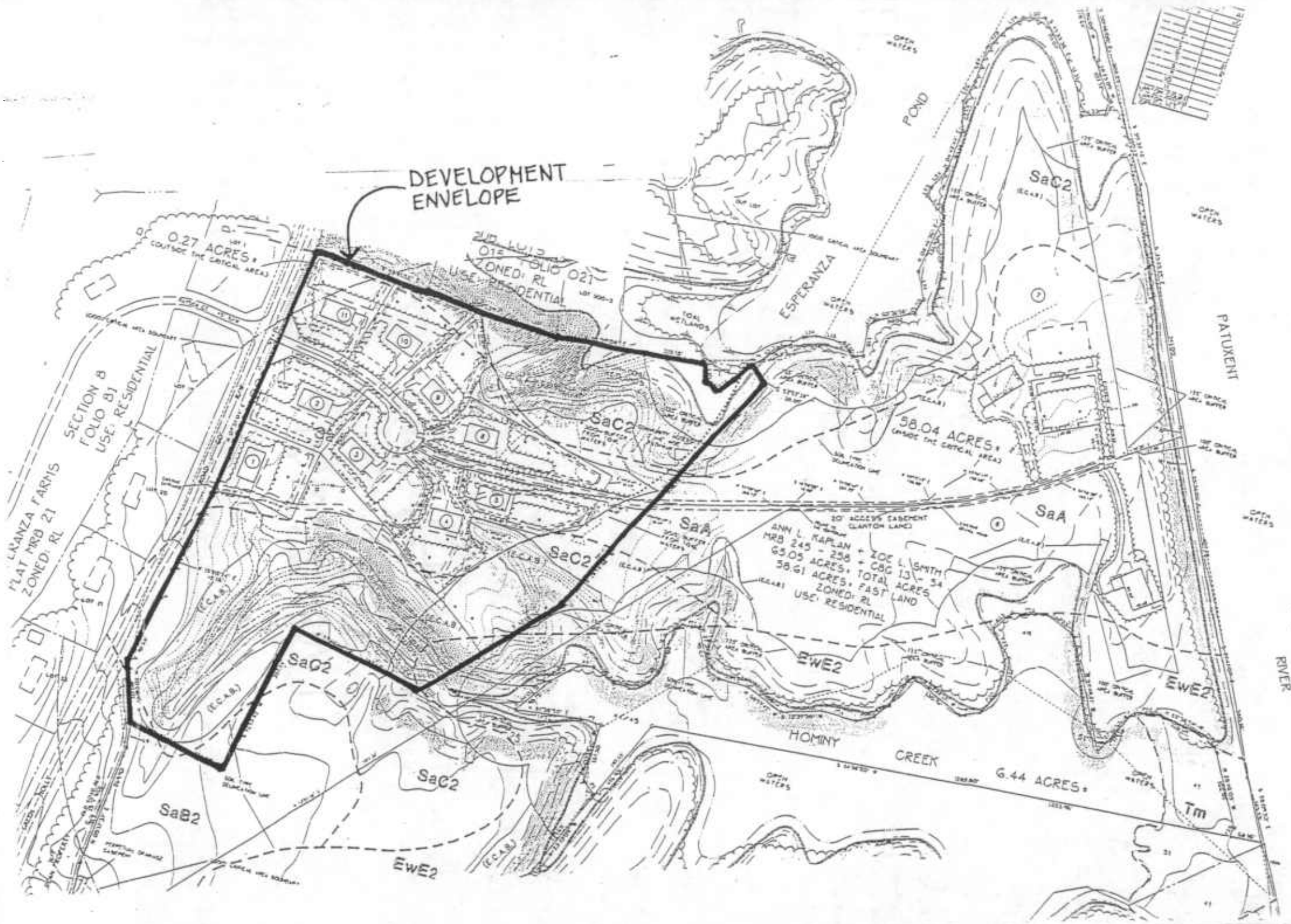
The property is bordered to the north and south by two tidal ponds and some contiguous areas of tidal wetlands. There are extensive areas of steep slopes on the property; however, the development envelope does not include any of these areas. There are several Habitat Protection Areas on the site including the Buffer and expanded Buffer, and Forest Interior Dwelling Birds (FIDS) habitat. The tidal flats in the Patuxent River adjacent to the site have been identified as historic waterfowl staging and concentration areas. There are no known threatened or endangered plant or animal species on the site.

Commission staff have worked closely with Heritage and Biodiversity Conservation staff, County staff, the consultant, and the property owner to address potential impacts to Habitat Protection Areas. In order to conserve the valuable FIDS habitat on the site, the nine lots have been reduced to approximately one half to three quarters of an acre in size and have been designed to minimize clearing. The house locations and drainfield locations have been identified

in order to reduce forest edges. In addition, the development is located at least 300 feet from the tidal ponds in order to maintain viable riparian corridors. Most of the steep slopes on the site are located within this 300 foot Buffer. The proposed growth allocation should have no impacts on the historic waterfowl staging and concentration area since the two large lots, located outside of the development envelope, are adjacent to the Patuxent River shoreline.

The proposed growth allocation request is consistent with the Commission's policies regarding growth allocation. The remainder of the parent parcel will remain RCA, therefore allowing the "development envelope" approach to be used in calculating the proposed 17.77 acre deduction. The project is located adjacent to an area currently designated as LDA and is located at least 300 feet beyond the landward edge of tidal wetlands or tidal waters.

The County Commissioners approved the award of growth allocation for this project on March 11, 1997. In recommending the project for an award of growth allocation, the Board of County Commissioners acknowledged that this project had been extensively reviewed by the Environmental Review Team and that public hearings on the project had been held by both the Planning Commission and the County Commissioners. The County currently has 1607.21 acres of growth allocation remaining. If the two requests being considered at this time are approved, then 1587.94 acres will be available for future allotment.



DEVELOPMENT ENVELOPE

0.27 ACRES
OUTSIDE THE CRITICAL AREA

ZIP LUIS
015 PUBLIC 021
ZONED: RL
USE: RESIDENTIAL

OPEN WATERS
POND

SaC2
(E.C.A.B.)

OPEN WATERS

PATIENT RIVER

SECTION 8
FOLIO B1
USE: RESIDENTIAL

MANZA FARIAS
FLAT MRB 21
ZONED: RL

SaC2

58.04 ACRES
INSIDE THE CRITICAL AREA

SaA

ANN L. RAPLAN
MRB 245 - 258
65.05 ACRES
JOE L. SMITH
COG 13 - 34
38.61 ACRES
TOTAL ACRES
FAST LAND
ZONED: RL
USE: RESIDENTIAL

SaC2

SaC2
(E.C.A.B.)

EWE2

EWE2

RIVER

SaC2

HOMINY CREEK

6.44 ACRES
INSIDE THE CRITICAL AREA

SaB2

EWE2

Tm

Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

APPLICANT: St. Mary's County Board of County Commissioners

PROPOSAL: Growth Allocation Request for Gardiner's Place
Subdivision

COMMISSION ACTION: Concurrence with Chairman's Determination

STAFF RECOMMENDATION: Approval

STAFF: Mary Owens

**APPLICABLE LAW/
REGULATIONS:**

COMAR 27.01.02.06 - Location and Extent of Future
Intensely Developed and Limited Development Areas
Natural Resources Article, Section 8-1808.1 - Growth
Allocation in Resource Conservation Areas

DISCUSSION:

The Board of County Commissioners of St. Mary's County is requesting 17.77 acres of growth allocation for a nine lot clustered subdivision on the Patuxent River in California, Maryland. The remainder of the parent parcel (40.27 acres within the Critical Area) will be divided into two large lots, of approximately 20 acres.

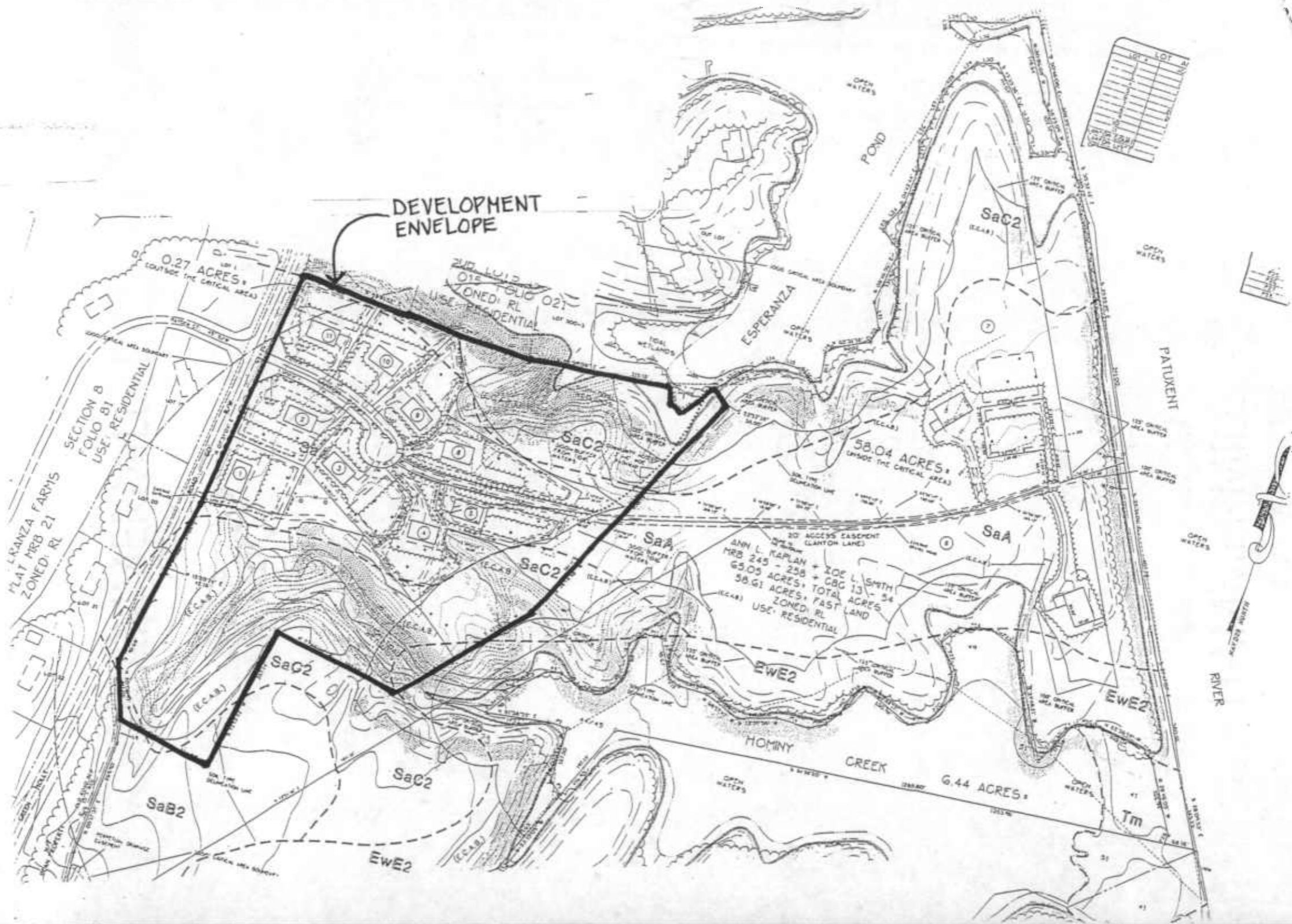
The property is bordered to the north and south by two tidal ponds and some contiguous areas of tidal wetlands. There are extensive areas of steep slopes on the property; however, the development envelope does not include any of these areas. There are several Habitat Protection Areas on the site including the Buffer and expanded Buffer, and Forest Interior Dwelling Birds (FIDS) habitat. The tidal flats in the Patuxent River adjacent to the site have been identified as historic waterfowl staging and concentration areas. There are no known threatened or endangered plant or animal species on the site.

Commission staff have worked closely with Heritage and Biodiversity Conservation staff, County staff, the consultant, and the property owner to address potential impacts to Habitat Protection Areas. In order to conserve the valuable FIDS habitat on the site, the nine lots have been reduced to approximately one half to three quarters of an acre in size and have been designed to minimize clearing. The house locations and drainfield locations have been identified

in order to reduce forest edges. In addition, the development is located at least 300 feet from the tidal ponds in order to maintain viable riparian corridors. Most of the steep slopes on the site are located within this 300 foot Buffer. The proposed growth allocation should have no impacts on the historic waterfowl staging and concentration area since the two large lots, located outside of the development envelope, are adjacent to the Patuxent River shoreline.

The proposed growth allocation request is consistent with the Commission's policies regarding growth allocation. The remainder of the parent parcel will remain RCA, therefore allowing the "development envelope" approach to be used in calculating the proposed 17.77 acre deduction. The project is located adjacent to an area currently designated as LDA and is located at least 300 feet beyond the landward edge of tidal wetlands or tidal waters.

The County Commissioners approved the award of growth allocation for this project on March 11, 1997. In recommending the project for an award of growth allocation, the Board of County Commissioners acknowledged that this project had been extensively reviewed by the Environmental Review Team and that public hearings on the project had been held by both the Planning Commission and the County Commissioners. The County currently has 1607.21 acres of growth allocation remaining. If the two requests being considered at this time are approved, then 1587.94 acres will be available for future allotment.



Concurrence

Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

APPLICANT: Talbot County

PROPOSAL: Refinement: Erosion Control - Add flexibility to determination of structural vs nonstructural controls

COMMISSION ACTION: Concurrence

STAFF: Greg Schaner

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.01.04.03B (shore erosion protection)
Natural Resources Article §8-1809(p) (program refinements)

DISCUSSION:

The County's Zoning Ordinance [Section 19.12(b)(5)(v)[e]] establishes a list of criteria to be used in determining which type of shoreline protection method (i.e., structural or nonstructural) to use on each site. Currently, the criteria are mandatory; every property owner in Talbot County with intentions to install shore erosion protection devices must abide by the criteria. The County Council approved a bill to amend this provision to make the criteria permissive rather than mandatory. The effect of the bill is to change the existing language from "the following criteria shall be used ..." [emphasis added] to "the following criteria should be used ..." [emphasis added].

The Critical Area Criteria [COMAR 27.01.04.03B] require that "local jurisdictions shall adopt policies to be reflective of shoreline characteristics to accomplish" certain "objectives" relating structural versus nonstructural means of shoreline protection. Staff believe that the use of the term "objectives" implies a set of guidelines or goals which should be achieved, and, for this reason, they are not strict requirements. Therefore, the County's proposed modification is consistent with COMAR 27.01.04.03B. In addition, the Tidal Wetlands Division staff of the Maryland Dept. of the Environment, which issues State permits for shoreline protection work, has worked with our staff and the County planning staff on this modification and do not have any concerns with the proposed change.

Attached to this staff report is a copy of the County's proposed language changes to the Zoning Ordinance.

A BILL TO AMEND SECTION 19.14 (c) (1) (iv) [g], OF TITLE 19. ZONING, OF THE TALBOT COUNTY CODE, TO REQUIRE FINAL SUBDIVISION RECORDATION OR SITE PLAN APPROVAL WITHIN TWO (2) YEARS AFTER FINAL GROWTH ALLOCATION APPROVAL.

SECTION ONE: BE IT ENACTED by the County Council of Talbot County that Title 19. Zoning, of the Talbot County Code, Section 19.14 (c) (1) (iv) [g], Growth Allocation District Boundary Amendments in Critical Area, be amended to read as follows:

[g] All requests approved by the County Council shall be submitted by the County to the Maryland Critical Area Commission for approval as an amendment to the County's Critical Area Program. By State Law, the Commission has ninety (90) days to act on a request. If no action is taken in ninety (90) days, the request will be considered approved. A request approved by the County Council shall take effect sixty (60) days after adoption by the Council, and upon approval by the Critical Area Commission.

If a project receiving growth allocation approval, in accordance with the provisions of this subsection, does not obtain final subdivision recordation or final site plan approval, as appropriate, within two (2) years of the final growth allocation approval, the Critical Area and Zoning Classifications may revert to the previously designated classifications, upon recommendation of the Planning Officer and approval by the County Council.

Upon receipt of a written request by the property owner or the applicant, a time extension may be granted to the two (2) year period, upon a recommendation by the Planning Officer and approval by the County Council.

A request denied by the Critical Area Commission may be reconsidered by the County Council. Such a request shall be revised by the applicant to address the reasons for Critical Area Commission denial. The revised request shall be submitted to the Planning Officer for reconsideration by the County Council within ninety (90) days of Critical Area Commission denial. An extension of the ninety (90) day deadline may be requested for a specific period of time, if the applicant can demonstrate, to the satisfaction of the Planning Officer, circumstances beyond the applicant's control.

SECTION TWO: BE IT FURTHER ENACTED that this Bill shall take effect sixty (60) calendar days from its passage.

Chesapeake Bay Critical Area Commission



STAFF REPORT
April 2, 1997

APPLICANT: Talbot County

PROPOSAL: Refinement: Growth Allocation - Requirement for final subdivision recordation or site plan approval within two (2) years of growth allocation

COMMISSION ACTION: Concurrence

STAFF: Greg Schaner

**APPLICABLE LAW/
REGULATIONS:** Natural Resources Article §8-1808.1 (growth allocation)
Natural Resources Article §8-1809(p) (program refinements)

DISCUSSION:

The County has approved a bill to add new language to the growth allocation provisions of the Zoning Ordinance [Section 19.12(c)(1)(iv)[g]] which would require final subdivision recordation or site plan approval within two (2) years after final growth allocation approval. This type of time limit is contained in many local Critical Area programs.

Attached to this staff report is a copy of the County's proposed language changes to the Zoning Ordinance.

A BILL TO AMEND TITLE 19. ZONING, OF THE TALBOT COUNTY CODE, BY AMENDING SECTION 19.12(b)(5)(v)[e] SITE PLAN REGULATIONS FOR CRITICAL AREA, TO CHANGE THE CRITERIA USED IN DETERMINING THE APPROPRIATENESS OF STRUCTURAL VERSUS NONSTRUCTURAL SHORELINE PROTECTION MEASURES FROM MANDATORY TO PERMISSIVE.

SECTION ONE: BE IT ENACTED by the County Council of Talbot County that Title 19. Zoning, of the Talbot County Code, Section 19.12(b)(5)(v)[e] Site Plan Regulations for Critical Area - Shore Protection be amended to make the criteria permissive instead of mandatory by repealing and reenacting the first sentence of Subsection [e] to read as follows:

[e] The following criteria should be used in determining the appropriateness of structural versus nonstructural protection measures.

SECTION TWO: BE IT FURTHER ENACTED that this Bill shall take effect sixty (60) calendar days from the date of its passage.

Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

APPLICANT: Talbot County

PROPOSAL: Refinement: Bed & Breakfast Accommodations - Permit
by special exception in LDA

COMMISSION ACTION: Concurrence

STAFF: Greg Schaner

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.01.02.04 (Limited Development Areas)
Natural Resources Article §8-1809(p) (program
refinements)

DISCUSSION:

The County has approved a bill to enable bed and breakfast accommodations as a special exception use in the Rural Residential zoning district (similar to LDA) subject to conditions. These uses are currently not allowed in the Rural Residential district. All Critical Area development criteria would still apply.

Attached to this staff report is a copy of the County's proposed language changes to the Zoning Ordinance.

*D. Evans concern re. spacing of properties
by this rule*

Concurrence

A BILL TO AMEND TITLE 19. ZONING, OF THE TALBOT COUNTY CODE, BY AMENDING SECTION 19.4(a) GENERAL TABLE OF USE REGULATIONS BY ZONING DISTRICTS, TO ALLOW BED AND BREAKFAST ACCOMMODATIONS AS A SPECIAL EXCEPTION USE IN THE (RR) RURAL RESIDENTIAL ZONING DISTRICT, SUBJECT TO CONDITIONS.

SECTION ONE: BE IT ENACTED by the County Council of Talbot County, Maryland, that Title 19. Zoning, of the Talbot County Code, Section 19.4(a) General Table of Use Regulations by Zoning Districts be amended by adding Bed and Breakfast as a Special Exception Use in the (RR) Rural Residential Zoning District, subject to the conditions set forth in Section 19.4(b)(3), as amended below.

(iv) *amendment*

SECTION TWO: BE IT ENACTED by the County Council of Talbot County, Maryland, that Title 19. Zoning, of the Talbot County Code, Section 19.4(b)(3)(iv)[c] be amended to read as follows:

[c] The minimum lot size in a RC (Rural Conservation) or RR (Rural Residential) zoning district for a Bed and Breakfast use shall be two (2) acres;

SECTION THREE: BE IT FURTHER ENACTED by the County Council of Talbot County that this Bill shall take effect sixty (60) calendar days from the date of its passage.

Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

APPLICANT: Department of General Services (DGS)

PROPOSAL: World War II Memorial

JURISDICTION: Anne Arundel County

COMMISSION ACTION: Vote (tentative)

STAFF RECOMMENDATION: Approval

STAFF: Lisa Hoerger

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

DISCUSSION:

The Department of General Services (DGS) is proposing to construct a World War II Memorial located within the Route 450 right-of-way north of the Severn River Bridge and south of the existing Governor Ritchie Memorial Overlook. The project includes an obelisk, pedestals, open amphitheater, walks and walls. The existing parking area for the Governor Ritchie Memorial Overlook will accommodate handicapped parking, and a 32 car new crushed stone parking area will accommodate the anticipated overflow. The proposed crushed stone parking area is just outside of the Critical Area.

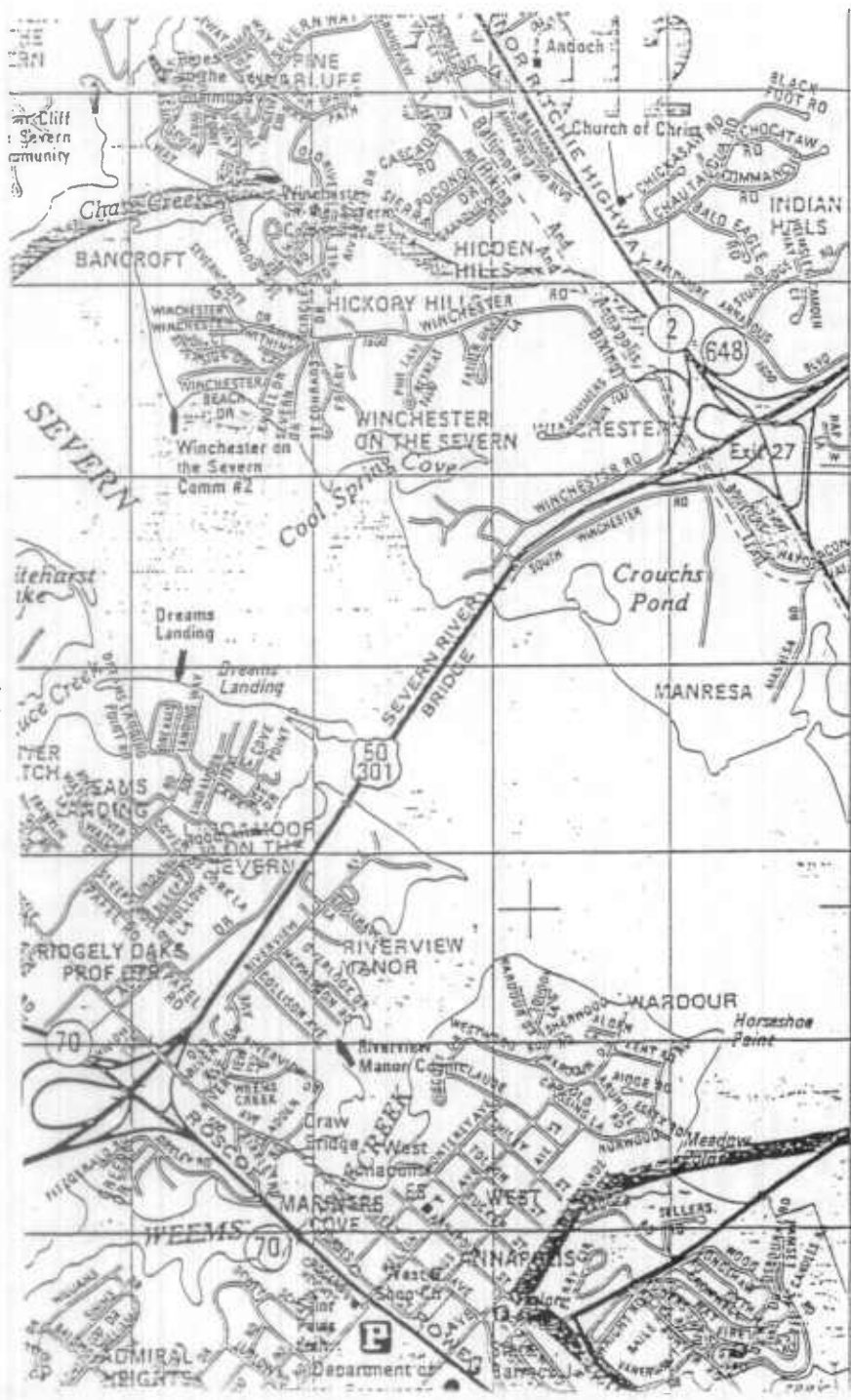
The site is in an area of intense development as it is surrounded by Route 450 on either side and presently has an existing parking area and memorial that comprises 81,000 square feet of impervious acres (1.86 acres). The project will increase the amount of impervious surface on the site by 19,000 square feet (.6 acre). A worksheet showing the 10% pollutant reduction has been reviewed by staff and meets the requirement. Based on the calculations the applicant is required to remove at a minimum of 6.60 lbs of phosphorus and will be removing 10.80 lbs of phosphorus using two infiltration trenches.

The Heritage and Biodiversity Program of the Department of Natural Resources (DNR) has also reviewed the project site and found no threatened or endangered plant or animal species present. In addition, no habitat protection areas will be impacted or clearing will occur within the Critical Area by this proposal. Anne Arundel County planning staff reviewed the project and had only minor comments regarding the new parking area outside the Critical Area.

STAFF REPORT
April 2, 1997
Continued

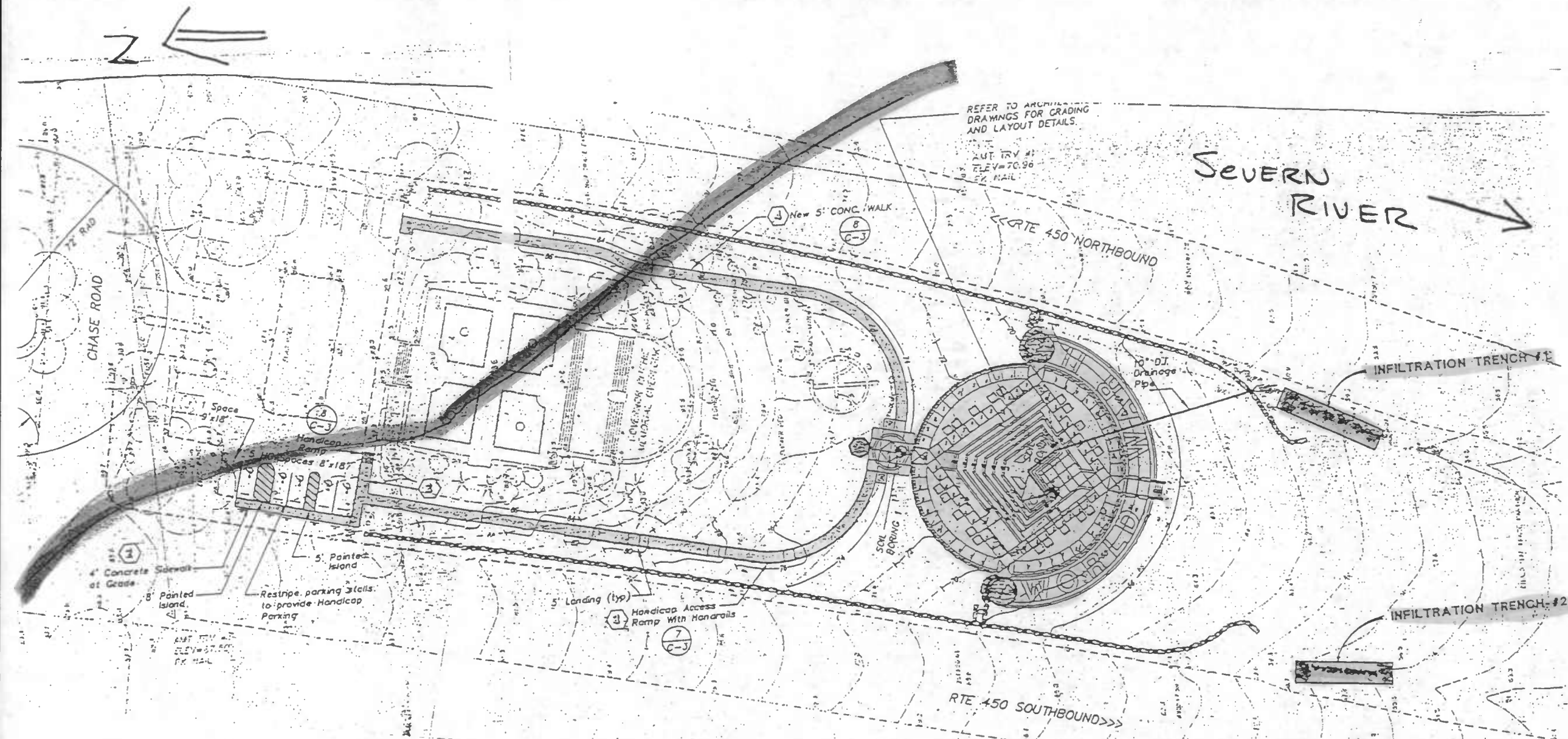
At the time of this report, the Sediment and Erosion Control plans and the Stormwater Management plans were awaiting final approval from the Maryland Department of the Environment (MDE).

Vicinity Map



Project Location

DGS - WORLD WAR II MEMORIAL



Green - approximate Critical Area boundary line
Yellow - new impervious area (parking, sidewalks, amphitheater)
Blue - SWM - stormwater management

K. Dwyer - motion to approve
STIR Sec.

W/C

Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

APPLICANT: DNR - Public Lands

PROPOSAL: Construction of a Microwave Communications Link from
North Point State Park to Hart-Miller Island

JURISDICTION: Baltimore County

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Approval

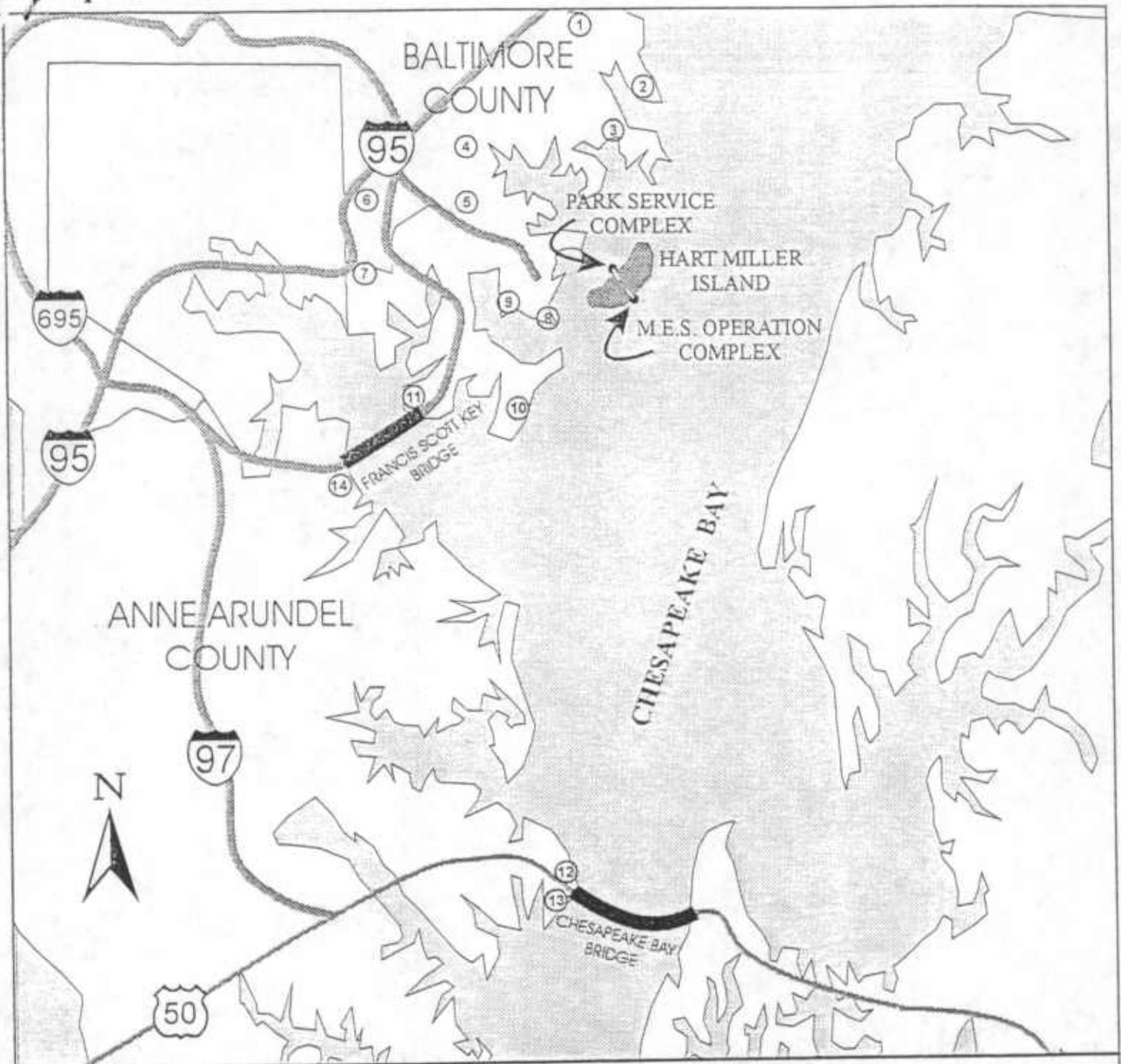
STAFF: Susan McConville

APPLICABLE LAW/
REGULATIONS: COMAR 27.02.05.03

DISCUSSION:

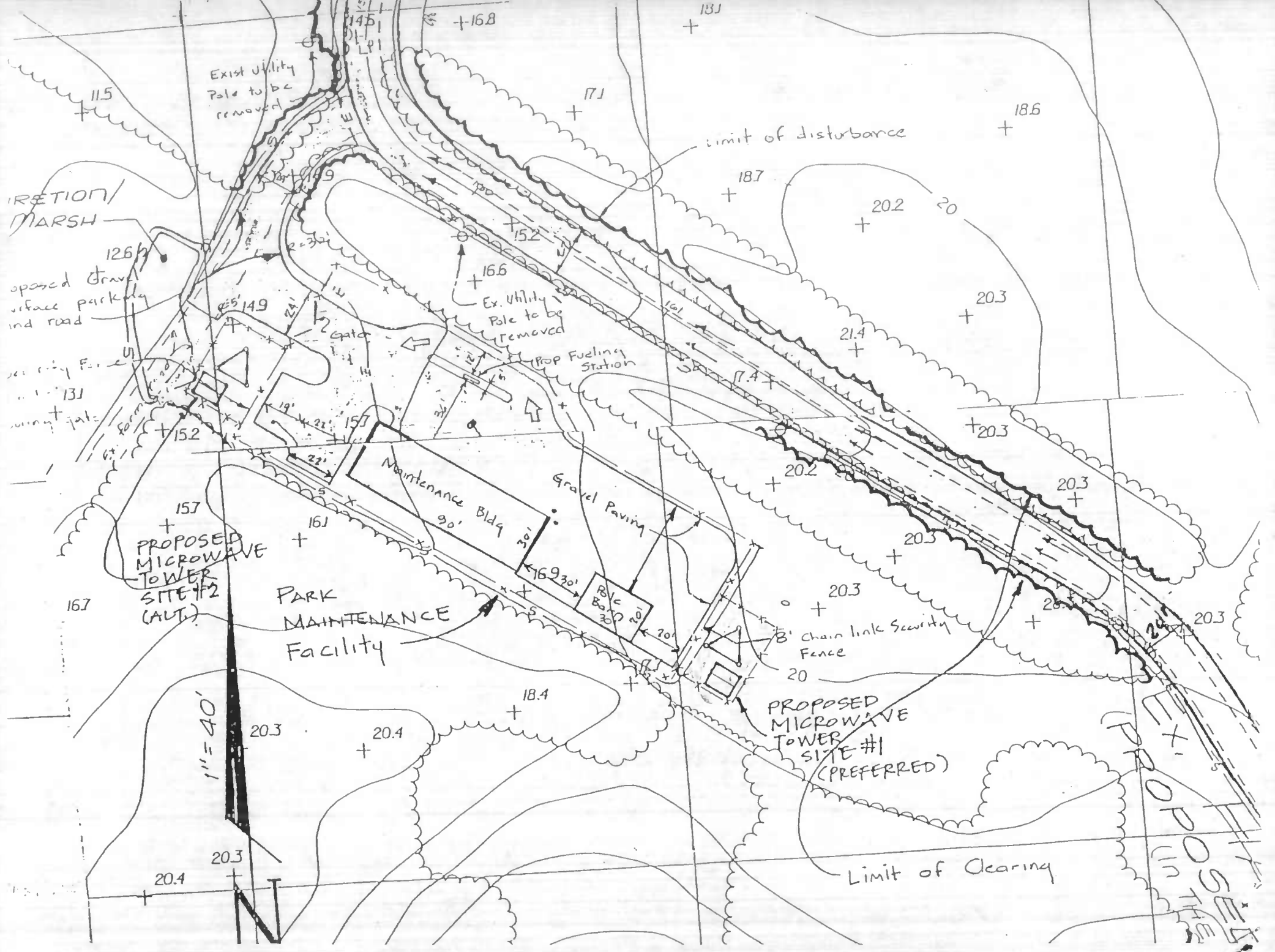
The proposed Microwave Tower is needed to provide a reliable communication system to protect people and equipment on Hart-Miller Island. According to DNR Engineering and Construction, North Point State Park provides the only feasible location for a tower. The proposed location for the 120 foot Microwave Tower is within the maintenance facility area approved in the North Point State Park/ Black Marsh Master Plan. This location is outside of the 100-foot Buffer and no trees will be impacted.

Construction of the Microwave Tower will result in 130 square feet of new impervious surface area. This new impervious surface includes the foundation for the equipment shelter, and the concrete Tower piers. Screening plantings will be provided using native plant species.



PROPOSED HART MILLER ISLAND MICROWAVE SITES CONSIDERED

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> ① Gunpowder Falls Hammerman Shop ② Aberdeen Proving Grounds, Graces Quarters ③ Carroll Island BGE Plant ④ Martin State Airport, MSP Facility ⑤ Essex Community College ⑥ Dundalk National Guard Armory ⑦ Dundalk Police Tower | <ul style="list-style-type: none"> ⑧ Rocky Point County Park ⑨ Rocky Point County Park Maintenance Facility ⑩ North Point State Park ⑪ Sparrows Point SHA Facility (Francis Scott Key Bridge) ⑫ Sandy Point State Park Water Tower ⑬ Bay Bridge Toll Police Facility ⑭ CSX Cox Creek Property |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



RETENTION/
MARSH

Exposed Gravel
Surface parking
and road

Security Fence
131
utility pole

Exist Utility
Pole to be
removed

Ex. Utility
Pole to be
Removed

Prop Fueling
Station

PROPOSED
MICROWAVE
TOWER
SITE #2
(ALT.)

PARK
MAINTENANCE
Facility

PROPOSED
MICROWAVE
TOWER
SITE #1
(PREFERRED)

8' chain link Security
Fence

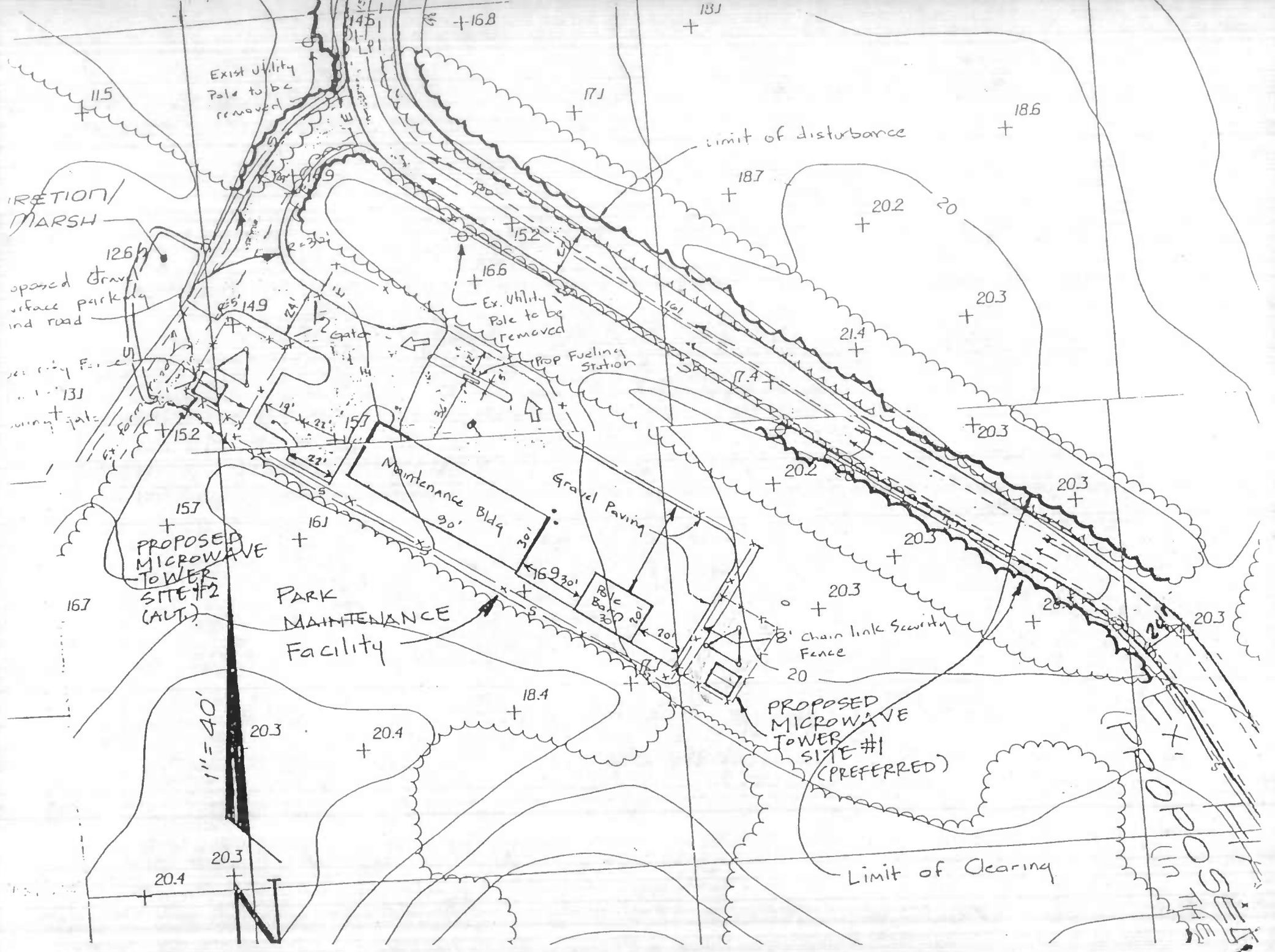
Limit of Clearing

limit of disturbance

1" = 40'



PROPOSED
SITE



Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

APPLICANT: DNR - Public Lands

PROPOSAL: Construction of the "Circuit Trail" at North Point State Park in accordance with the approved Master Plan for North Point State Park and Black Marsh Wildland

JURISDICTION: Baltimore County

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Approval

STAFF: Susan McConville

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.02.05.03 B (2) (d): Areas of public access to the shoreline, such as foot paths, scenic drives, and other public recreational facilities, should be maintained and, if possible encouraged to be established.

COMAR 27.02.05.03 B (3)

DISCUSSION:

In 1991, 667 acres of North Point State Park was designated as a Wildland. In 1993, the Master Plan for North Point State Park/ Black Marsh Wildlands was approved by MD DNR. The Plan has been reviewed and approved by the Critical Area Commission. The plan includes a circuit trail having a width of 8 feet with a natural surface. (see attached map and Master Plan pp 19-20).

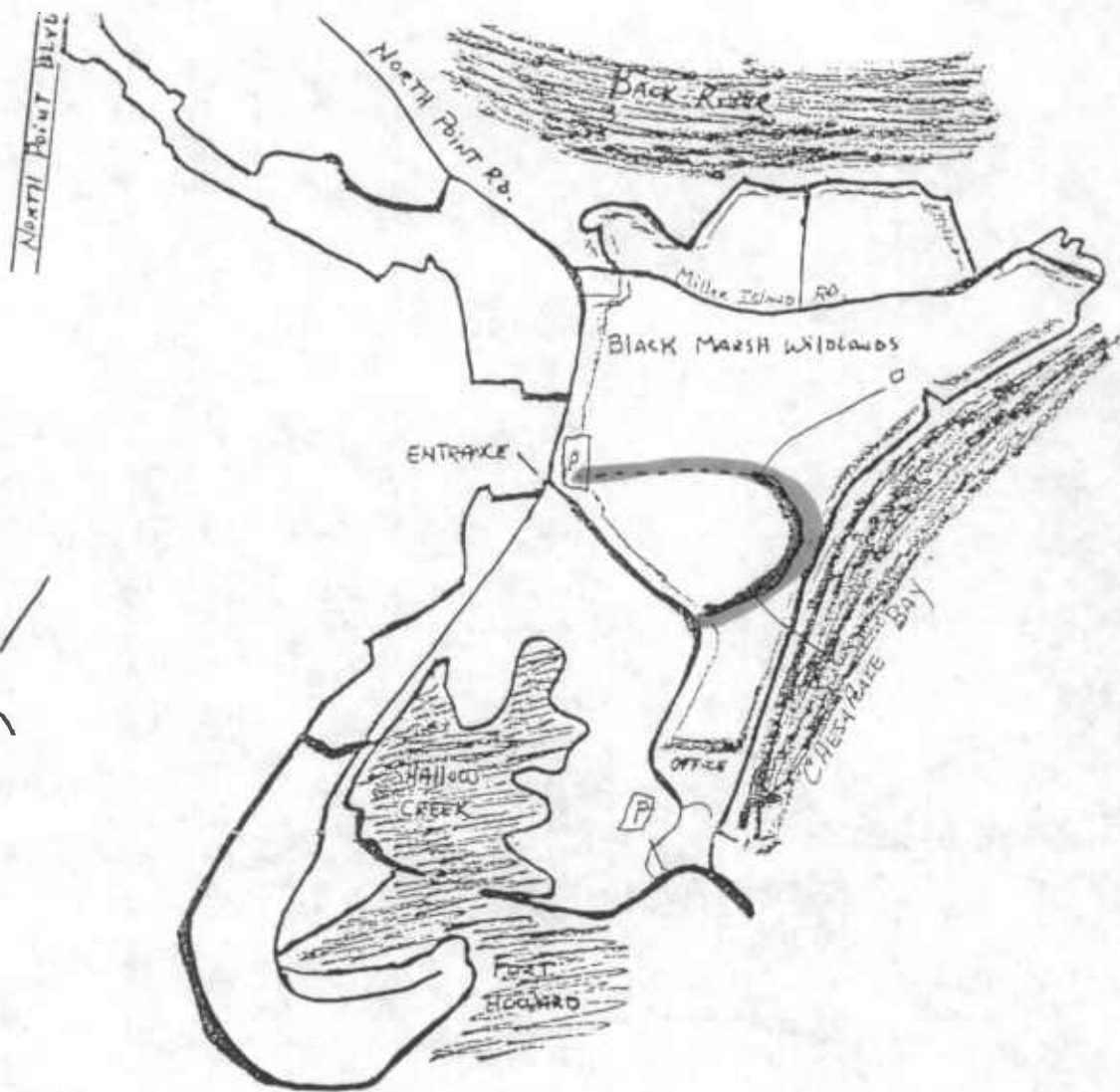
The purpose of this project is to complete the circuit trail which will enable park visitors to hike a loop trail from the entrance trailhead parking area to Black Marsh and the Observation deck, then to return to the trailhead parking area. The completion of the circuit trail will involve limited disturbance of vegetation in the Critical Area outside of the 100-foot Buffer and will not create any new impervious surfaces. The 1600 foot trail is divided into three sections:

- The first section of the proposed trail is 600 feet long and is on the trolley right-of way. There is no vegetation on this section of the trail which has an existing stone ballast

surface, however there are some trees that border this section that will require trimming.

- The second section of the trail leaves the trolley right-of-way and travels 150 feet through a wooded area to a field. This section of trail is currently being used as a footpath. Some small trees of one to one and a half inch in size will have to be removed to clear the eight foot wide path.
- The third section of the trail runs along the edge of a field that was in agriculture until 1991. The length of the third section is 850 feet, with the last 750 feet of the trail located over a slag surface. Some vegetation will have to be removed to clear the 8 ft wide path including green briar and trees that are one and one and a half inches in size. This portion of the trail is located in the Wildlands. The clearing of this section of the trail will be done mostly by volunteers, using hand tools.

NORTH Point
State Park /
Black Marsh
Wildlands



- P - PARKING
- WILDLANDS
- EXISTING TRAIL
- PROPOSED TRAIL

(Circuit Trail and Trailhead Parking) --- A 15-car gravel parking lot located approximately where the existing interim parking area is situated will provide a rendezvous spot for field trips to the Marsh and guided tours through the agriculture lands. Two spaces for buses will also be provided. Located adjacent to the lot is a trailhead for a Marsh circuit hiking trail, which will have a width of no more than 8 feet with a natural surface. A 1,100-foot hiking trail spur leading from the main path will take visitors to a Black Marsh overlook. The overlook, or small observation deck, will be located on fastland adjacent to the wetlands. The deck will rise ten feet from grade in order to provide a vista. The existing boardwalk leading out into the marsh will be dismantled and removed.

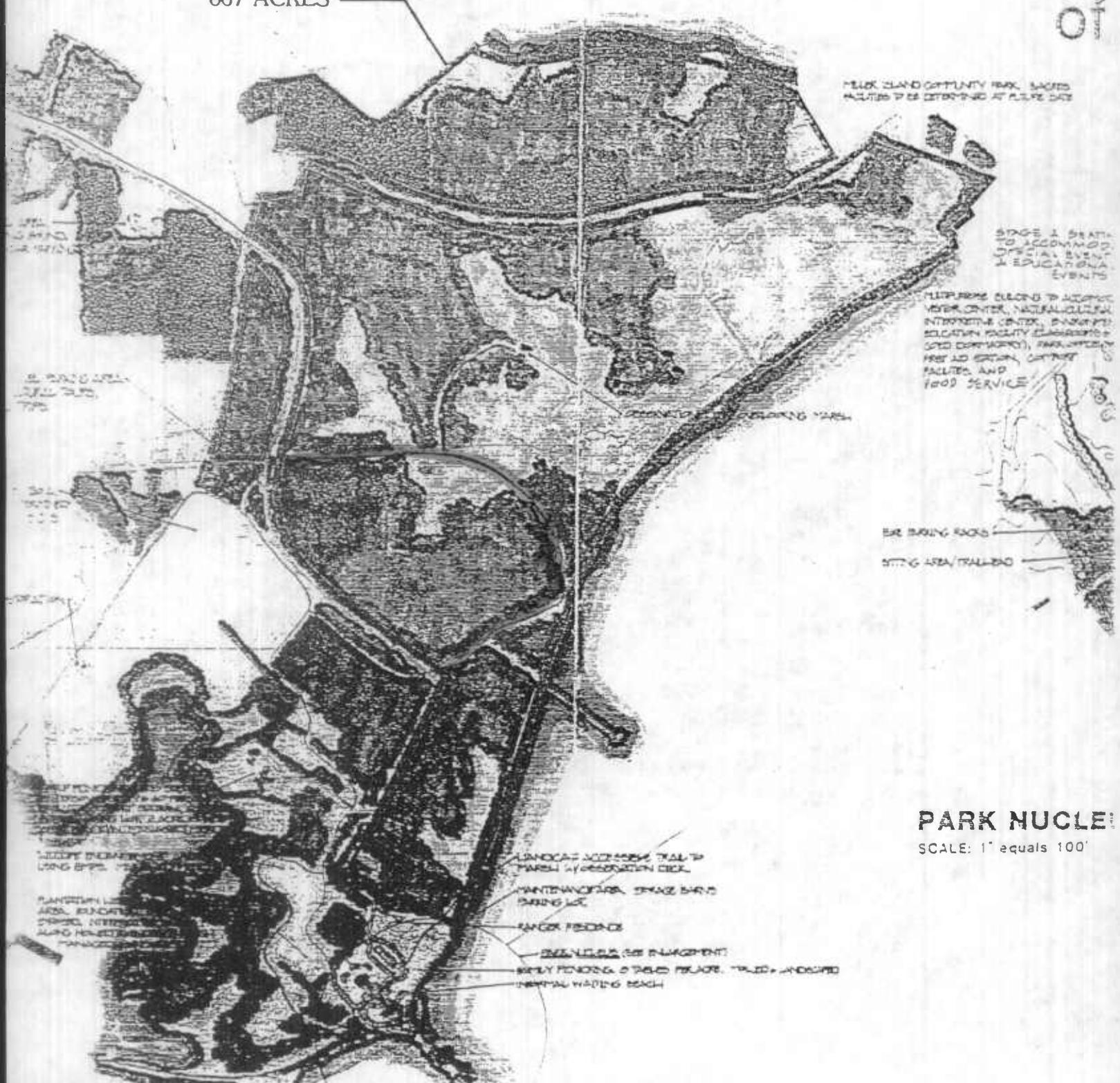
A 1000-foot segment of the Bay Shore Trail will be used to complete the circuit (see map).
[Master Plan pp. 19-20]

North Point

Map of

BLACK MARSH WILDLANDS

667 ACRES



PARK NUCLEUS
SCALE: 1" equals 100'

Chesapeake Bay Critical Area Commission

STAFF REPORT

April 2, 1997

APPLICANT: DNR - Public Lands

PROPOSAL: Construction of a Microwave Communications Link from North Point State Park to Hart-Miller Island

JURISDICTION: Baltimore County

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Approval

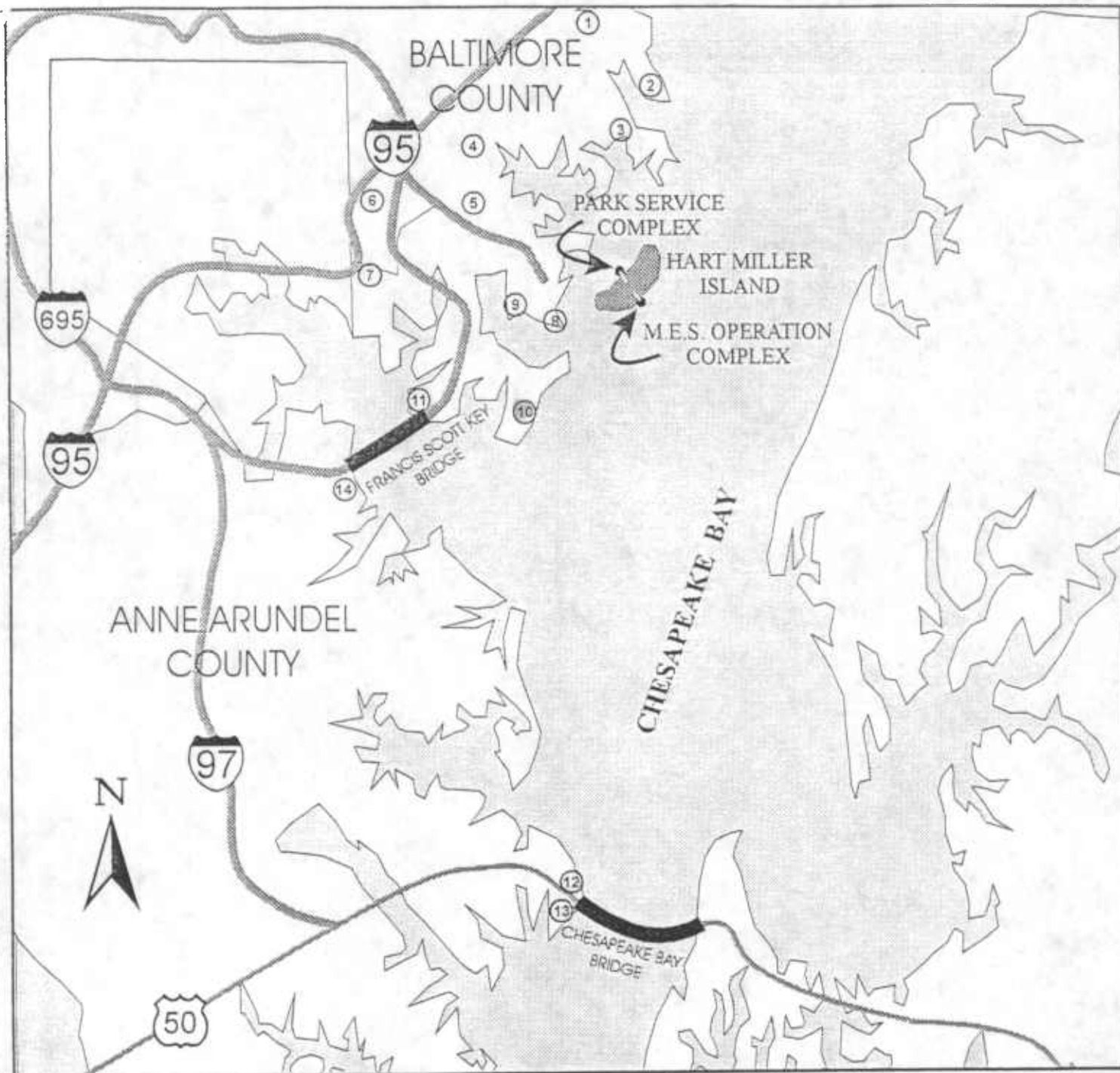
STAFF: Susan McConville

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.02.05.03

DISCUSSION:

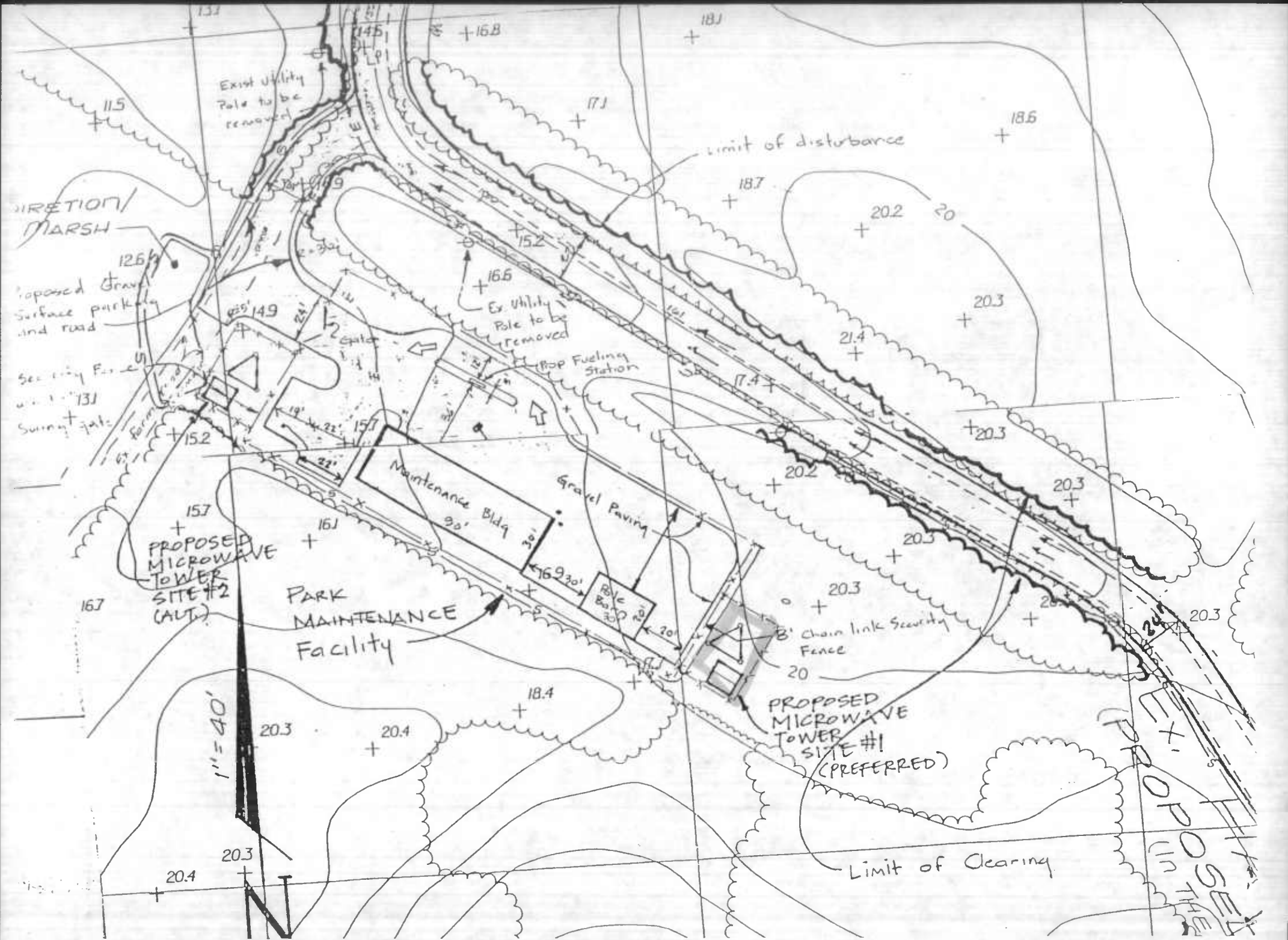
The proposed Microwave Tower is needed to provide a reliable communication system to protect people and equipment on Hart-Miller Island. According to DNR Engineering and Construction, North Point State Park provides the only feasible location for a tower. The proposed location for the 120 foot Microwave Tower is within the maintenance facility area approved in the North Point State Park/ Black Marsh Master Plan. This location is outside of the 100-foot Buffer and no trees will be impacted.

Construction of the Microwave Tower will result in 130 square feet of new impervious surface area. This new impervious surface includes the foundation for the equipment shelter, and the concrete Tower piers. Screening plantings will be provided using native plant species.



***PROPOSED HART MILLER ISLAND
MICROWAVE SITES CONSIDERED***

- | | |
|---------------------------------------------|----------------------------------------------------------|
| ① Gunpowder Falls Hammerman Shop | ⑧ Rocky Point County Park |
| ② Aberdeen Proving Grounds, Graces Quarters | ⑨ Rocky Point County Park Maintenance Facility |
| ③ Carroll Island BGE Plant | ⑩ North Point State Park |
| ④ Martin State Airport, MSP Facility | ⑪ Sparrows Point SHA Facility (Francis Scott Key Bridge) |
| ⑤ Essex Community College | ⑫ Sandy Point State Park Water Tower |
| ⑥ Dundalk National Guard Armory | ⑬ Bay Bridge Toll Police Facility |
| ⑦ Dundalk Police Tower | ⑭ CSX Cox Creek Property |



Guidance



information and analyses for Critical Area decision makers

NUMBER ONE

FEBRUARY 1996

IMPERVIOUS SURFACES

Prepared by Mary Owens

Imperviousness represents the imprint of land development on the landscape. The Critical Area Act and Criteria incorporate land planning techniques designed to mitigate the adverse impacts of development on water quality and plant, fish and wildlife habitat.

By establishing limits to the area of new impervious surface on project sites in Limited Development Areas (LDAs) and Resource Conservation Areas (RCAs), the Act and Criteria attempt to change the patterns of development around the Bay.

PURPOSE

The purpose of this paper is to provide local planners with guidance about the degree to which certain materials, structures and construction methods may be considered pervious. The paper is meant to establish the Commission's position on issues regarding the perviousness of commonly used surfaces and to fix parameters with which to evaluate the perviousness of surfaces not addressed herein. It is not the intent of this paper to displace methodologies that local planners have been using to calculate impervious surface but rather to provide a mechanism whereby development review is streamlined while consistent implementation of the Critical Area Act and Criteria remains ensured.

While the Act and Criteria prescribe clear limits to the area of new impervious surface, a definition of impervious surfaces is not provided. Perviousness is not an absolute characteristic of a material. The degree of perviousness is often determined by how a material is installed and how it is used. Field calculations of impervious surface area must also consider installation and use.

BACKGROUND

The framers of the Critical Area Act and Criteria considered limits to impervious surface within the Critical Area crucial to achievement of the Act's goals. In surveying the available scientific literature, it was noted that water quality and habitat degradation accelerate rapidly in watersheds when impervious surface areas are 12-13% of the total area. Current studies indicate an even lower threshold for stream degradation (**Figure 1**).

Sections 8-1808.3 of the Critical Area Act and 27.01.02.04C(7) of COMAR set limits on impervious surfaces in LDAs and RCAs. Performance standards for development are intended to promote achievement of the following policies:

1. *Maintain, or, if possible improve the quality of runoff and ground water entering the Chesapeake Bay and its tributaries;*
2. *Maintain, to the extent practicable, existing areas of natural habitats*

In addition, paragraph D(2) provides information regarding stormwater runoff, stating:

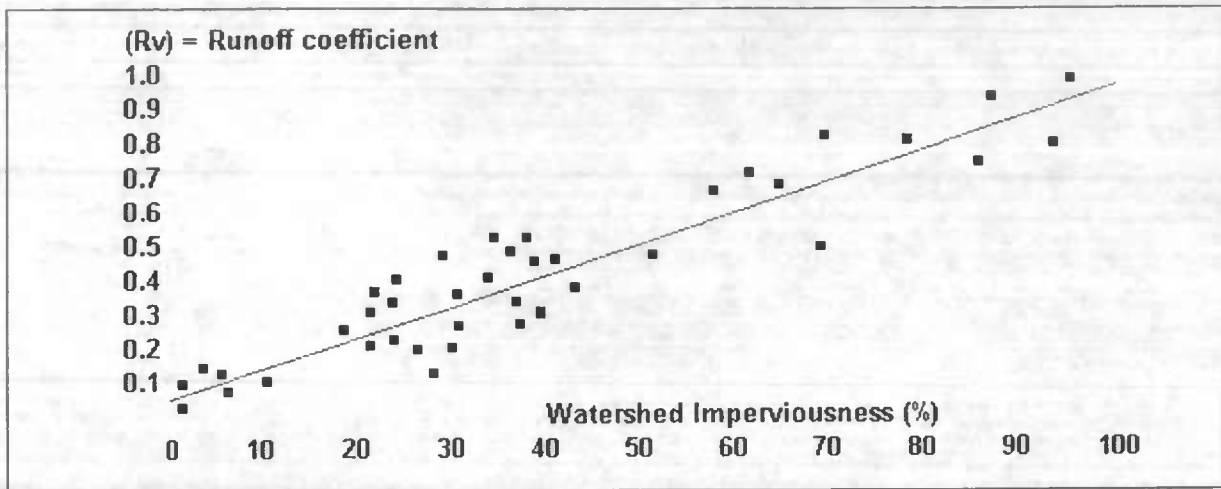


Figure 1: Stream degradation increases proportionately with imperviousness. Adapted from Schueler, *Watershed Protection Techniques 1* (Fall 1994).

(a) **Limitation on Stormwater Runoff.** Development may not cause downstream property, watercourses, channels, or conduits to receive stormwater runoff at a higher volume or rate than would have resulted from a 10-year storm were the land in its predevelopment state. [Around the Chesapeake Bay, a 10-year storm is one that drops 5-6 inches of rain in a 24-hour period.]

(b) **Storage Capacity.** All stormwater storage facilities shall be designed with sufficient capacity to achieve the water quality goals of [the criteria] and to eliminate all runoff caused by the development in excess of that which would have come from the site if it were in its predevelopment state.

The Criteria state that “excess stormwater runoff” means all increases in stormwater resulting from the following activities:

- (a) An increase in the imperviousness of the site, including all additions to buildings, roads, and parking lots;
- (b) Changes in permeability caused by compaction during construction [or subsequent use] or modifications in contours, including the filling or drainage of small depression areas;
- (c) Alteration of drainageways, or regrading of slopes;
- (d) Destruction of forest [or areas of natural vegetation]; or
- (e) Installation of collection systems to intercept street flows or to replace swales or other drainageways

While the Act and Criteria frame the subject of impervious surfaces in the context of stormwater management, their reference to alteration of existing natural features indicates a broader concern about maintaining existing natural habitat and hydrologic patterns. By defining “excess stormwater runoff” in terms of its causes, the Criteria widen the conceptual definition of impervious surfaces to include not merely the material but its construction, installation, and use (Figure 2).

IMPACTS OF IMPERVIOUSNESS

It is important to realize that the environmental impacts of impervious surfaces are not limited simply to increases in stormwater quantity. By their nature, new impervious surfaces usually involve permanent impacts to the land.

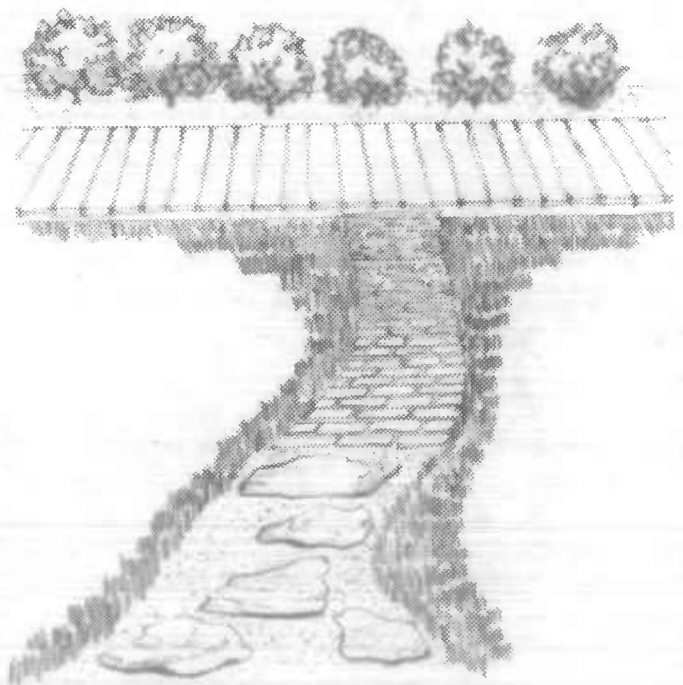


Figure 2: Different semi-pervious walkway surfaces can minimize runoff and add interest to the landscape.

Exceeding the 25% Limit on Lots Under One-half Acre

For a lot or parcel one-half acre or less in size, local jurisdictions may allow an applicant to exceed the impervious surface limits in the Act under certain circumstances. For these lots, total impervious surface limits may exceed the 25% limit by not more than 25% or 500 square feet, whichever is greater. Essentially, this section of the Bill raises the impervious surface limit on lots of one half acre or less to 31.25% ($25\% + [25\% \text{ of } 25\%] = 31.25\%$) or adds 500 square feet to the 25% limit, whichever is greater. In these situations, a variance is not required; however, a local jurisdiction must make

sure that the following conditions exist: 1) impervious surfaces on the property have been minimized (**Figure 3**); 2) water quality impacts associated with runoff from the new impervious surfaces have been minimized or best management practices have been implemented; and 3) on-site mitigation or fees-in-lieu are used to offset potential adverse water quality.

Exceeding the 15% Limit On Lots Over One-half Acre But Under One Acre

For a lot or parcel that existed prior to December 1, 1985 and is greater than one-half acre but less than one acre, local jurisdictions may allow an applicant to exceed the impervious surface limits in the Act under certain circumstances. For these lots, total impervious surface coverage may be as much as 5,445 square feet. Essentially, this section of the Bill eliminates the problem with using the 25% limit for lots just under one-half acre and the 15% limit for lots just over one-half acre. The 5,445 square foot figure is based on 25% of one-half acre and use of this figure will eliminate any bias towards lots just slightly smaller than one-half acre. In these situations, a variance is not required; however, a local jurisdiction must make sure that the following conditions

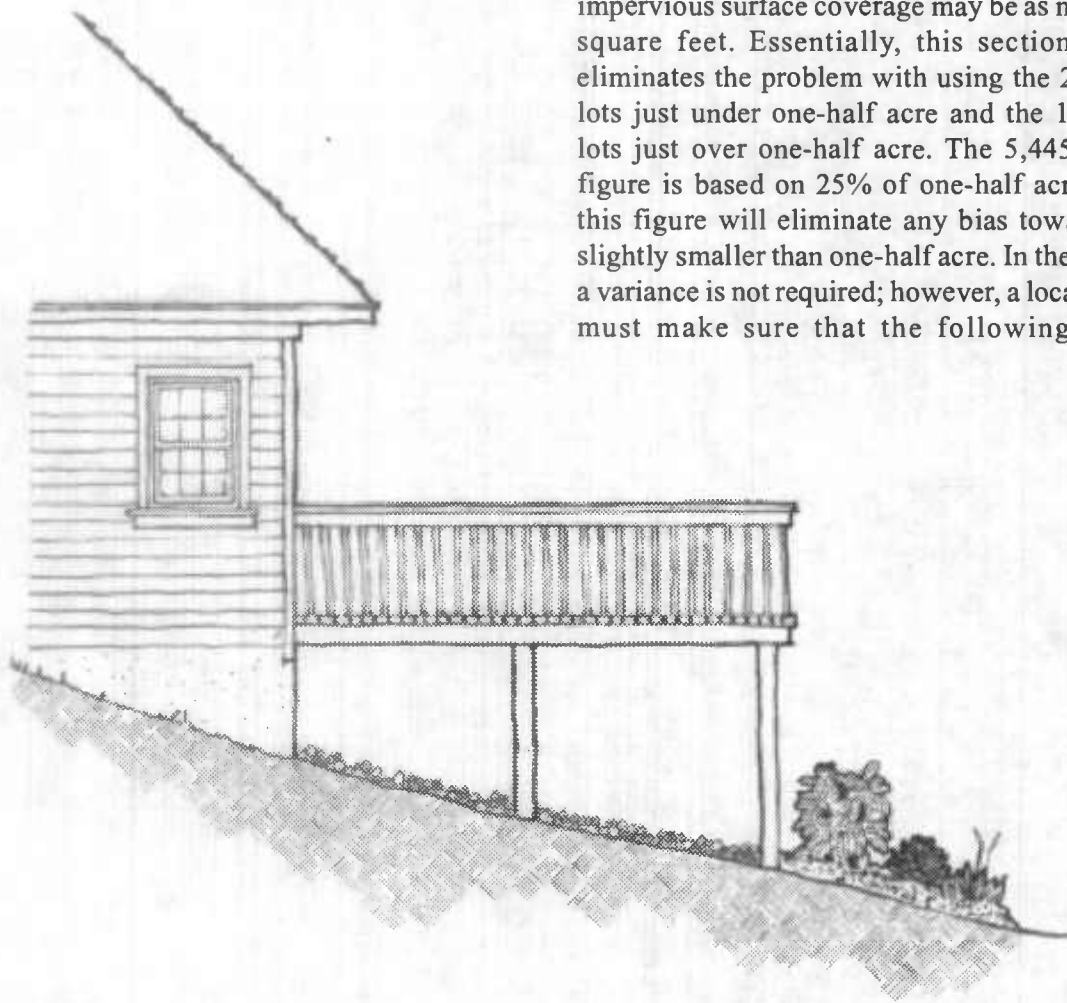


Figure 4: This deck is constructed with gaps between the boards to achieve perviousness and employs 6 inches of gravel and plantings beneath it to minimize subsequent runoff.

Once an area is cleared of vegetation, graded and compacted, and an impervious surface or partially pervious surface is constructed or installed, the area generally will not return to a naturally vegetated state. New impervious surfaces change natural drainage patterns and impact the environment by affecting the way that stormwater and, in some cases, tidal water moves over the landscape and through the soil. New impervious surfaces can affect the quantity, velocity, and quality of stormwater resulting in impacts to nearby land and waterbodies.

Construction of new impervious surfaces can cause spiraling adverse impacts. New impervious surfaces reduce the area of land available for infiltration and alter natural hydrologic patterns. Construction of impervious surfaces reduces the area of land that can support forest or other types of vegetation and so reduce areas of natural habitat for a wide variety of species. The removal of vegetation impacts stormwater management because trees, shrubs, grasses, and downed woody debris help manage stormwater by trapping silt and sediment, stabilizing erodible areas, increasing infiltration, and reducing surface runoff. In addition, smooth, compacted surfaces increase the velocity of stormwater and its

erosive potential. Impervious surfaces also affect stormwater quality by providing a surface that collects pollutants and sediments between rainfall events, concentrating these potentially detrimental substances in the first flush of a storm event.

LEGISLATIVE CHANGES

In May 1996, the Maryland General Assembly passed Senate Bill 657, which addresses impervious surface limits within the Critical Area. The Bill requires that local jurisdictions amend their Critical Area Programs on or before December 31, 1996 to address the provisions of the Bill. The Bill involves three significant changes to the current regulations.

Lots Under One-half Acre

If a parcel or lot one-half acre or less in size existed on or before December 1, 1985, then man-made impervious surfaces are limited to 25% of the parcel or lot. Formerly the regulations distinguished between residential and nonresidential use and the 25% limit for lots in nonresidential use only applied to lots of one-fourth acre or less in size. The new legislation effectively raises the size limit to one-half acre on all qualifying lots.



Figure 3: This design for a driveway minimizes impervious surfaces and runoff by using a mix of surfaces including pavers and by keeping a grass median.

exist: 1) impervious surfaces on the property have been minimized; 2) water quality impacts associated with runoff from the new impervious surfaces have been minimized or best management practices have been implemented (Figure 4); and 3) on-site mitigation or fees-in-lieu are used to offset potential adverse water quality impacts.

Other impervious surface limits of the Critical Area Act remain unchanged by the 1996 legislation. Table 1 summarizes impervious surfaces limits based on the 1996 legislation.

IS IT PERVIOUS?

Table 2 details the construction materials and surfaces that generate the most frequently asked questions regarding perviousness. The table was developed by considering the following factors: (1) alteration of natural drainage patterns; (2) impeded infiltration; (3) treatment to remove silt, sediment or nutrients; (4) vegetation, and; (5) groundwater discharge. In addition, the practices of local jurisdictions and information from engineers, planners and landscape architects familiar with materials and techniques were incorporated in the evaluations.

Table 1: Allowances under 1996 legislation

LOT/PARCELSIZE in square feet	IMPERVIOUS SURFACE LIMIT
0 - 8,000	25% of Parcel + 500 s.f.
8,001 - 21,780	31.25% of Parcel
21,781 - 36,300	5,445 s.f.
36,301 - 43,560	15% of Parcel

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Table 2: Types of surfaces

Type of Structure	Impervious	Pervious	Notes
Deck, special construction		•	Spaces between boards, 6" gravel under deck, plantings.
Driveway, asphalt	•		
Driveway, bank run gravel	•		Use causes gravel to become compacted over time.
Driveway, blue chip stone	•		Use causes stone to become compacted over time.
Driveway, concrete	•		
Driveway, dirt	•		Use causes soil to become compacted over time.
Driveway, oyster shell	•		Use causes shells to become compacted over time.
Driveway, pavers (Balcon or other)			Site-specific evaluation determines perviousness.
Parking lots, gravel	•		Use causes gravel to become compacted over time.
Parking lots, gravel overflow	•		Use causes gravel to become compacted over time.
Parking lots, "turf block"	•		Use causes turf areas to become compacted over time.
Patios, brick and mortar	•		
Patios, brick on sand	•		Bricks are impervious and preclude growth of vegetation.
Patios, slate	•		
Ponds			BMPs are not included in impervious surface calculations.
Sidewalks, concrete	•		
Sidewalks, brick and mortar	•		
Sidewalks, brick on sand	•		
Sidewalk, wood (boardwalk)		•	Spaces between boards, 6" gravel under deck, plantings.
Swimming pools, in-ground	•		
Swimming pools, above ground	•		
Tennis courts, asphalt or polymer	•		
Tennis courts, clay	•		
Tennis courts, grass		•	
Walkways, gravel			Site-specific evaluation determines perviousness.
Walkways, wood chip		•	

Chesapeake Bay Critical Area Commission
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 John C. North, II, Chairman

The Chesapeake Bay Critical Area Commission was created by an Act of the Maryland General Assembly in 1984. The Commission is charged with promulgating Criteria necessary to: 1) minimize impacts from stormwater runoff; 2) conserve fish, plant and wildlife habitat; and, 3) establish land use policies for the Critical Area which accommodate growth and address the environmental impacts which result from the number, movement and activities of people in the Bay's sensitive shoreline areas. Sixty-one jurisdictions carry out local Critical Area programs consistent with the Critical Area Act and Criteria.