

ORDINANCE NO. 3558

AN ORDINANCE to amend Chapter 6 (ZONING), Title 7 (PLANNING AND DEVELOPMENT) of The Code of the City of Alexandria, Virginia, 1981, as amended, by adding thereto a new Article S (ENVIRONMENTAL MANAGEMENT).

WHEREAS, the Chesapeake Bay Preservation Act, Virginia Code Sections 10.1-2100 et seq., and the regulations promulgated thereunder by the Chesapeake Bay Local Assistance Board, require the City of Alexandria to adopt a local ordinance implementing the Chesapeake Bay Preservation Act; and

WHEREAS, based upon the findings set forth in Section 7-6-400 within the ordinance, and for the purposes set forth in Section 7-6-401 within the ordinance, and based upon all other facts and circumstances of which the city council may properly take notice in its capacity as the legislative body of the City of Alexandria, the city council finds and determines that adoption of this ordinance is necessary and desirable to protect the public health, safety and general welfare; now, therefore,

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Chapter 6, Title 7 of The Code of the City of Alexandria, Virginia, 1981, as amended, be and the same hereby is amended by adding thereto a new Article S to read as follows:

ARTICLE S: ENVIRONMENTAL MANAGEMENT

Sec. 7-6-400 General Findings.

The Chesapeake Bay is one of the most productive estuaries in the world, providing substantial economic and social benefits to the people of the Commonwealth of Virginia. Healthy state and local economies are integrally related to and dependent upon the health of the Chesapeake Bay. The general welfare of the people of the Commonwealth depends upon the health of the Bay.

The waters of the Chesapeake Bay and its tributaries have been degraded significantly by point source and nonpoint source pollution, which threatens public health and safety and the general welfare.

Appropriate land use regulations and construction and maintenance practices have proven ability to reduce pollution that damages water quality of the Chesapeake Bay and its tributaries.

Sec. 7-6-401 Purpose.

- A. It is the policy of the City of Alexandria, Virginia to protect the quality of water in the Chesapeake Bay and its tributaries and, to that end, to require all land uses and land development in the city to:
- (1) safeguard the clean waters of the Commonwealth from pollution;
 - (2) prevent any increase in pollution of state waters;
 - (3) reduce existing pollution of state waters;
 - (4) promote water resource conservation.
- B. To fulfill this policy, these regulations are adopted to minimize potential pollution from stormwater runoff, minimize potential erosion and sedimentation, reduce the introduction of harmful nutrients and toxins into state waters, maximize rainwater infiltration while protecting groundwater, and ensure the long-term performance of the measures employed to accomplish the statutory purpose.

Sec. 7-6-402 Authority.

These regulations are issued under the authority of Section 10.1-2108 of Chapter 21, Title 10.1 of the Code of Virginia (the Chesapeake Bay Preservation Act, hereinafter "the Act"), and the regulations promulgated thereunder by the Chesapeake Bay Local Assistance Board, and section 10.1-603.3 of the Code of Virginia, which authorizes the city to adopt a local storm water management program. Authority to protect water quality is also provided by section 15.1-489 of the Code of Virginia.

Sec. 7-6-403 Definitions.

The following words and terms used in this article have the following meanings, unless the context clearly indicates otherwise.

- A. Best Management Practice (BMP) -- means a practice, or combination of practices, that is determined by the Director to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with the water quality goals of these regulations; examples include stormwater retention ponds, infiltration

trenches and filtration systems.

- B. Buffer area -- means an area of natural or established vegetation managed to protect other components of a Resource Protection Area and state waters from significant degradation due to land disturbances.
- C. Development -- means the construction or substantial alteration of residential, commercial, industrial, institutional, recreational, transportation or utility facilities or structures.
- D. Director -- means the Director of Transportation and Environmental Services (T&ES) or his designee, as authorized in writing.
- E. Floodway -- means all lands as defined in section 7-6-53(1).
- F. Highly erodible soils -- means soils (excluding vegetation) with an erodibility index (EI) from sheet and rill erosion equal to or greater than eight. The erodibility index for any soil is defined as the product of the formula $RKLS/T$, as defined by the "Food Security Act (F.S.A.) Manual" of August 1988, in the "Field Office Technical Guide" of the U.S. Department of Agriculture Soil Conservation Service; where K is the soil susceptibility to water erosion in the surface layer; R is the rainfall and runoff; LS is the combined effects of slope length and steepness; and T is the soil loss tolerance.
- G. Highly permeable soils -- means soils with a given potential to transmit water through the soil profile. Highly permeable soils are identified as any soil having a permeability equal to or greater than six inches of water movement per hour in any part of the soil profile to a depth of 72 inches (permeability groups "rapid" and very rapid"), as found in the "National Soils Handbook" of July 1983 in the "Field Office Technical Guide" of the U.S. Dept. of Agriculture Soil Conservation Service.
- H. Impervious cover -- means a surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to: roofs, buildings, streets, parking

areas, and any concrete, asphalt, or compacted gravel surface.

- I. Infill -- means utilization of vacant land in previously developed areas.
- J. Land Disturbance -- means any land change which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land.
- K. Nonpoint Source Pollution -- means contamination from diffuse sources that is not regulated as point source pollution under Section 402 of the Clean Water Act.
- L. Nontidal wetlands -- means those wetlands, other than tidal wetlands, that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the U.S. Environmental Protection Agency pursuant to Section 404 of the Federal Clean Water Act, in 33 CFR 328.3b, dated November 13, 1986.
- M. Pre-development -- refers to the land use that exists at the time that plans for the development are submitted to the City. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing land use at the time the first item is submitted shall establish pre-development conditions.
- N. Post-development -- refers to conditions that reasonably may be expected or anticipated to exist after completion of the development activity on a specific site or tract of land.
- O. Redevelopment -- means the process of developing land that is or has been previously developed.
- P. Runoff or Stormwater Runoff -- means that portion of precipitation that is discharged across the land surfaces or through conveyances to one or more waterways.
- Q. State Waters -- means all waters on the surface or

in the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction.

- R. Stormwater management facility -- means a device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow.
- S. Tidal shore or shore -- means land contiguous to a tidal body of water between the mean low water level and the mean high water level.
- T. Tidal wetlands -- means vegetated and nonvegetated wetlands as defined in section 62.1-13.2 of the Code of Virginia.
- U. Tributary stream -- means any perennial stream that is so depicted on the most recent U.S. Geological Survey 7-1/2 minute topographic quadrangle map (scale 1:24,000).
- V. Use -- means any activity on the land other than development, including, but not limited to agriculture, horticulture and silviculture.
- W. Water-dependent facility -- means a development of land that cannot exist outside of the Resource Protection Area and must be located on the shoreline by reason of the intrinsic nature of its operation. These facilities include, but are not limited to: (i) ports; (ii) the intake and outfall structures of power plants, water treatment plants, sewage treatment plants, and storm sewers and in-stream or regional stormwater management facilities; (iii) marinas and other boat docking facilities; (iv) beaches and other public water-oriented recreation areas, and (v) fisheries or other marine resources facilities.
- X. Water quality volume -- means the volume equal to the first 0.5 inch of runoff multiplied by the total impervious area of the development site.
- Y. Watershed -- means the total drainage area contributing runoff to a single point.
- Z. Wetlands -- means tidal and nontidal wetlands.

Sec. 7-6-404 Administration of Article.

- A. The Director of Transportation and Environmental Services is charged with the responsibility for the administration of this article.
- B. Duties and Authority. In the administration of this article the Director's duties and authority shall include, without limitation:
- (1) receiving applications for plan of development approval;
 - (2) reviewing applications to determine if they contain all information required and necessary for a determination of their merit;
 - (3) reviewing applications to determine their compliance with the provisions and intent of this article and their merit;
 - (4) docketing items for hearing before the planning commission and conferring with the city manager to schedule public hearings before the city council as necessary on applications;
 - (5) preparing a staff report for each application;
 - (6) interpreting the provisions of this article to ensure that its intent is carried out.
- C. Rules, Regulations and Procedures. The Director shall promulgate rules, regulations and procedures for the administration and enforcement of this article and shall promulgate rules, regulations and procedures for the processing of applications that ensure full review, comment and recommendations on each application by the department of transportation and environmental services. The city manager shall promulgate rules and procedures for review by other departments of applications, where such review is determined to be necessary or desirable and such procedures may include the establishment of a development review committee composed of departments of the city whose expertise is necessary or desirable in the review of applications. All such rules, regulations and procedures shall be transmitted to the city council at the time of issuance.
- D. Establishment of Fees. The Director shall by general rule approved by city council establish a

schedule of fees required for each application under this article to be paid at the time an application is submitted.

- E. Responsibility for Enforcement. The Director shall have the authority and the responsibility pursuant to article L of this chapter to ensure that all buildings and structures and the use of all land complies with the provisions of this article.
- F. The Director shall review, approve, disapprove, or approve with modifications or conditions or both the following elements of the plan of development:
 - (1) The environmental site assessment, required pursuant to section 7-6-416.
 - (2) The stormwater management plan, required pursuant to section 7-6-417.
 - (3) The water quality impact assessment, if required pursuant to section 7-6-418.
 - (4) Compliance of the plan of development with sections 7-6-409, 7-6-410, 7-6-411, 7-6-412 and 7-6-413.
- G. Review and decision on the remaining elements of the plan of development shall be as provided in the regulations of this code applicable to each such element.
- H. Review and decision on applications for exceptions shall be as provided in section 7-6-420.
- I. Review and decision on applications for exemptions shall be as provided in section 7-6-423.

Sec. 7-6-405 Designation of Chesapeake Bay Preservation Area Overlay District.

- A. All land within the corporate limits of the City is designated as a Chesapeake Bay Preservation Area (CBPA). The CBPA is divided into resource protection areas and resource management areas. The regulations set forth in this article shall apply as an overlay district, and shall supersede any land use or land development regulation of this code which is inconsistent with the provisions of this article.

B. Resource Protection Areas (RPAs) consist of sensitive land adjacent to or near the shoreline that has either an intrinsic water quality value due to the ecological and biological processes such land performs or that is sensitive to uses or activities such that the use results in significant degradation to the quality of state waters. In their natural condition, these lands provide for the removal, reduction, or assimilation of nonpoint source pollution entering the bay and its tributaries. An area of land that includes any one of the following land types shall be considered to be within a RPA:

- (1) Tidal wetlands;
- (2) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams;
- (3) Tidal shores;
- (4) Tributary streambeds; and
- (5) Buffer areas 100 feet in width located adjacent to and landward of the components listed in subsections 1-4 above, and along both sides of any tributary stream. Specific exceptions and standards for buffer requirements are set forth in sections 7-6-409 and 7-6-411.

C. Resource Management Areas (RMAs) include land that, if improperly used or developed, has a potential for causing significant water quality degradation or for diminishing the functional value of a RPA. Therefore, all lands in the City, not included in an RPA, shall constitute a RMA since all such land drains through natural (e.g., streams) or manmade (e.g., stormwater sewers) channels to the Potomac River.

Sec. 7-6-406 Incorporation of CBPA Map.

- A. The CBPA map, dated January 28, 1992, and signed by the Mayor and Director, prepared in accordance with the above designation criteria which define the boundaries of RPAs and RMAs is hereby incorporated by reference into the Alexandria City Code.
- B. The boundaries of RPAs and RMAs are drawn on the

map based on the rebuttable presumption that the lands within those boundaries meet the respective RPA and RMA designation criteria. In the event of conflict between the CBPA map and the designation criteria in section 7-6-405, the designation criteria shall be controlling. The Director may exercise judgment in determining site-specific boundaries based on more reliable field data provided by the applicant or staff and examined during the plan of development review process.

Sec. 7-6-407 Development and Uses Permitted in RPAs.

- A. Development is permitted in RPAs only if it is water dependent and is permitted in the underlying zoning district. Redevelopment is permitted in RPAs if it is permitted in the underlying zoning district. Development and redevelopment shall comply with all requirements in sections 7-6-409, 7-6-410 and 7-6-411.
- B. In addition to the development or redevelopment permitted in "A" above, the following uses only shall be permitted within a RPA to the extent that they are not prohibited by any other provision of this code or applicable law and provided they do not require development, redevelopment, structures, grading, fill, draining, or dredging:
 - (1) conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife;
 - (2) passive recreational activities, including but not limited to fishing, birdwatching, hiking, boating, horseback riding, swimming, and canoeing;
 - (3) educational activities, scientific research, and nature trails; and
 - (4) historic preservation and archeological activities.
- C. The following uses, which may involve structures, fill, flooding, draining, dredging, or excavating, shall be permitted within a RPA, to the extent specifically enumerated in these regulations and not prohibited by any other provision of this code or applicable law and subject to the Director's review and approval of design and construction

plans for compliance with this subsection:

- (1) construction, installation, operation and maintenance of electric, gas, telephone and cable television transmission lines, railroads and public roads constructed by VDOT or by or for the City of Alexandria in accordance with VDOT standards, and their appurtenant structures, in accordance with regulations promulgated pursuant to the Erosion and Sediment Control Law (sections 10.1-560 et seq. of the Code of Virginia and the Stormwater Management Act (sections 10.1-603.1 et seq. of the Code of Virginia); an erosion and sediment control plan and a stormwater management plan approved by the Department of Conservation and Recreation or by the City of Alexandria under local water quality protection criteria at least as stringent as the above state requirements shall be deemed to constitute compliance with these regulations;
- (2) construction, installation, and maintenance of water, storm or sanitary sewer, and local gas or other utility lines provided that:
 - (a) to the degree possible, the location of such utilities and facilities should be outside RPAs;
 - (b) no more land shall be disturbed than is necessary to provide for the desired utility installation;
 - (c) all such construction, installation, and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal permits, and designed and conducted in a manner that protects water quality;
 - (d) any land disturbance exceeding an area of 2500 square feet shall comply with the Erosion and Sediment Control regulations in the City Code.
- (3) limited excavating and filling in an area of 2500 or less square feet necessary for the repair and maintenance of piers, walkways, observation decks, duck blinds, wildlife management shelters, boathouses, and other

similar water-related structures, provided that they are built on pilings to allow unobstructed flow of water and preserve the natural contour of a RPA.

- (4) paved or unpaved bike or other recreational trails.
- (5) required construction, installation, minor modification and maintenance of in-stream or regional best management practices.

Sec. 7-6-408 Development and Uses Permitted in RMAs.

Development, redevelopment and uses authorized by the underlying zoning classification are permitted in the RMA provided such activity is carried out in accordance with the performance requirements set forth in sections 7-6-412 and 7-6-413.

Sec. 7-6-409 General Performance Requirements for Development and Redevelopment in RPAs.

A. The Director shall approve development or redevelopment in a RPA only if it is found that the regulated activity is in compliance with these regulations and that the applicant has demonstrated, by a preponderance of the evidence, that the proposed development or redevelopment meets or exceeds the following standards and the buffer requirements of subsection B:

- (1) No more land shall be disturbed than is necessary to provide for the proposed use, development or redevelopment.
- (2) Indigenous vegetation shall be preserved to the maximum extent possible consistent with the use, development or redevelopment proposed.
- (3) Development or redevelopment shall minimize impervious cover consistent with the use and development allowed.
- (4) The proposed development or redevelopment shall comply with the Erosion and Sedimentation Control regulations in this code.
- (5) Stormwater management requirements:

- (a) Any maintenance, alteration, use or improvement to an existing structure which does not degrade the quality of surface water runoff is exempt from stormwater management requirements.
- (b) Estimated post-development nonpoint source pollution load shall not exceed the estimated predevelopment nonpoint source pollution load of runoff based upon average land cover conditions within the city as calculated using standards, consistent with good engineering practice, established by the Director pursuant to section 7-6-404(C). (Redevelopment shall comply with additional criteria in section 7-6-410.)
- (c) The following options will be considered to comply with the stormwater management requirements of these regulations for development and redevelopment:
 - (i) incorporation of on-site BMPs that achieve the required control for development and redevelopment as determined by calculation procedures and BMP efficiencies in standards, consistent with good engineering practice, established by the Director pursuant to section 7-6-404(C). Maintenance agreement for any BMPs existing or installed is required; and

Redevelopment shall comply with additional criteria in section 7-6-410.
 - (ii) compliance with a locally adopted regional stormwater management program incorporating pro-rata share payments pursuant to the authority provided in section 15.1-466(j) of the Code of Virginia or a locally adopted regional stormwater management program adopted pursuant to the authority provided in section 15.1-292.4 of the Code of Virginia that results in

achievement of equivalent water quality protection; or

- (iii) compliance with a state or locally implemented program of stormwater discharge permits pursuant to section 402(p) of the Federal Clean Water Act, as set forth in 40 CFR 122, 123, 124 and 504, dated 11/16/90.
- (6) the non-water dependent portion of a development encompassing both a RPA and RMA is located outside of a RPA; and
- (7) access for development or redevelopment is provided with the minimum disturbance necessary; where possible, only a single point of access shall be provided.

B. Buffer requirements for RPAs:

- (1) The buffer shall achieve 75% reduction of sediments and 40% reduction of nutrients. A 100 foot wide buffer shall be considered adequate to meet this standard.
- (2) In order to maintain the functional value of the buffer area, indigenous vegetation may be removed only to provide for reasonable sight lines, access paths, general woodlot management, and BMPs as follows:
 - (a) Trees may be pruned or removed as necessary to provide for sight lines and vistas, provided that where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff; such shall require the approval of the City Arborist.
 - (b) Any path shall be constructed and surfaced so as to effectively control erosion.
 - (c) Dead, diseased, or dying trees or shrubbery may be removed and silvicultural thinning may be conducted as approved by the City Arborist. The City Arborist may approve a long term

management plan for a specific RPA which complies with professionally recognized management practices.

- (d) For shoreline erosion control projects, trees and woody vegetation may be removed, necessary control techniques employed, and appropriate vegetation established, all as approved by the City Arborist, to protect or stabilize the shoreline in accordance with the best available technical advice and applicable permit conditions or requirements.

(3) Exceptions to buffer requirements.

- (a) The buffer may be reduced to 50 feet if the Director determines that a combination of a smaller buffer and appropriate BMPs located landward of the buffer achieves a 75% reduction of sediment and 40% reduction in nutrients.

- (b) If buffer requirements reduce buildable area on lots recorded before 10/1/89, the Director may allow modifications as follows:

- (i) the reduction shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;

- (ii) if possible, equal area shall be established elsewhere on the site in a way to maximize water quality protection; and

- (iii) the buffer shall in no case be less than 50 feet.

Sec. 7-6-410 Additional Performance Requirements for Redevelopment in RPAs.

- A. The Director shall approve redevelopment in a RPA only if it is found that the regulated activity is in compliance with these regulations and that the applicant has demonstrated by a preponderance of the evidence that the proposed redevelopment meets or exceeds the following standards:

- (1) If currently served by properly functioning BMPs, the regulated activity shall not increase nonpoint source pollution load in runoff;
- (2) if not served by such BMPs, regulated activity shall reduce estimated nonpoint source pollution load in runoff by 10% based on actual predevelopment and post development site conditions; or
- (3) in addition to available stormwater management options delineated in section 7-6-409, a redevelopment site that is completely impervious as currently developed shall be considered to comply with the stormwater management requirements of these regulations if the applicant restores a minimum 20% of the site to vegetated open space.

- B. Redevelopment shall not result in any net-increase in impervious cover.
- C. These requirements apply in addition to, and in case of conflict shall control over, the requirements of section 7-6-409.

Sec. 7-6-411 Standards for Water Quality Impact Assessment.

A. Evaluation Procedure.

- (1) The Director shall approve a water quality minor impact assessment only if it is found that the proposed regulated activity is in compliance with these regulations and that the applicant has demonstrated by a preponderance of the evidence that the development or redevelopment, including any proposed modification or reduction to the buffer area, is consistent with these regulations and shall make a finding based upon the following criteria:
 - (a) The necessity of the proposed encroachment and the ability to place improvements elsewhere on the site to avoid disturbance of the buffer area;
 - (b) impervious surface is minimized;
 - (c) proposed BMPs, where required achieve

the requisite reductions in pollutant loadings;

- (d) the development, as proposed, meets the purpose and intent of these regulations;
 - (e) the cumulative impact of the proposed development when considered in relation to other development within the RPA in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.
- (2) The Director shall approve a water quality major impact assessment only if it is found that the proposed regulated activity is in compliance with these regulations and that the applicant has demonstrated by a preponderance of the evidence that the development or redevelopment, including any proposed modification to the buffer area, is consistent with these regulations and shall make a finding based upon the following criteria:
- (a) Within any RPA, the proposed development is water-dependent or constitutes redevelopment;
 - (b) the disturbance of wetlands shall comply with state and federal regulations;
 - (c) the development will not result in significant disruption of the hydrology of the site;
 - (d) the development will not result in significant degradation of water quality that could adversely affect aquatic vegetation or life;
 - (e) the development will not result in unnecessary destruction of plant material on site;
 - (f) proposed erosion and sediment control measures are adequate to achieve the required reductions in runoff, and prevent off-site transport of sediment during and after construction;

- (g) proposed stormwater management measures are adequate to control the stormwater runoff to achieve the required standard for pollutant control;
 - (h) proposed revegetation of disturbed areas will provide adequate erosion and sediment control benefits as determined by the Director;
 - (i) the design and location of any proposed drainfield will be in accordance with the requirements of section 7-6-409 and 7-6-416.
- (3) Upon receipt of any water quality major impact assessment application, the Director may determine if review by the Chesapeake Bay Local Assistance Department (CBLAD) is warranted and may request CBLAD to review the assessment and respond with written comments. Any comments by CBLAD will be incorporated into the final review by the Director provided that such comments are provided by CBLAD within 90 days of the request.

Sec. 7-6-412 General Performance Requirements for Development and Redevelopment in RMAs.

- A. The Director shall approve a development or redevelopment in a RMA only if it is found that the regulated activity is in compliance with these regulations and that the applicant has demonstrated, by a preponderance of the evidence, that the proposed development or redevelopment meets or exceeds the following standards:
- (1) No more land shall be disturbed than is necessary to provide for the use and development proposed.
 - (2) Indigenous vegetation shall be preserved to the maximum extent possible consistent with the use and development proposed.
 - (3) Land development shall minimize impervious cover consistent with the use or development proposed.
 - (4) Development exceeding 2,500 square feet of disturbance shall comply with the Erosion and Sedimentation Control regulations in the City

Code.

- (5) Stormwater management requirements:
- (a) Any maintenance, alteration, use or improvement to an existing structure which does not degrade the quality of surface water runoff is exempt from stormwater management requirements.
 - (b) Estimated post-development nonpoint source pollution load shall not exceed the estimated predevelopment nonpoint source pollution load of runoff based upon average land cover conditions within the City, as calculated using standards consistent with good engineering practice established by the Director pursuant to section 7-6-404(C).
 - (c) The following options will be considered to comply with the stormwater management requirements of these regulations for development and redevelopment:
 - (i) incorporation of on-site BMPs that achieve the required control for development and redevelopment as determined by calculation procedures and BMP efficiencies in standards established by the Director pursuant to section 7-6-404(C) consistent with good engineering practice;

Maintenance agreement for any BMPs existing or installed is required; and

Redevelopment shall comply with additional criteria in section 7-6-413.
 - (ii) compliance with a locally adopted regional stormwater management program incorporating pro-rata share payments pursuant to the authority provided in section 15.1-466(j) of the Code of Virginia or a locally adopted regional stormwater management program adopted pursuant to the

authority provided in section 15.1292-4 of the Code of Virginia that results in achievement of equivalent water quality protection; or

- (iii) compliance with a state or locally implemented program of stormwater discharge permits pursuant to section 402(p) of the federal Clean Water Act, as set forth in 40 C.F.R. 122, 123, 124 and 504, dated December 7, 1988.

- B. Redevelopment shall comply with the additional criteria in section 7-6-413.

Sec. 7-6-413 Additional Performance Requirements for Redevelopment in RMAs.

- A. The Director shall approve redevelopment in a RMA only if it is found that the regulated activity is in compliance with these regulations and that the applicant has demonstrated by a preponderance of the evidence that the proposed redevelopment meets or exceeds the following standards:

- (1) If currently served by properly functioning BMPs, regulated activity shall not increase nonpoint source pollution load in runoff;
- (2) if not served by such BMPs, regulated activity shall reduce estimated nonpoint source pollution load in runoff by 10% based on actual predevelopment and post-development site conditions; or
- (3) in addition to available stormwater management options delineated in section 7-6-418, a redevelopment site that is completely impervious as currently developed shall be considered to comply with the stormwater management requirements of these regulations if the applicant restores a minimum 20% of the site to vegetated open spaces.

- B. These requirements apply in addition to, and in case of conflict shall control over, the requirements of section 7-6-412.

Sec. 7-6-414 Development Review Process.

Any development or redevelopment exceeding 2,500 square feet of land disturbance shall be subject to the following development review process prior to any clearing of the site or the issuance of any building, land use or land development permit. Any development or redevelopment in a RPA of 2,500 square feet or less of land disturbance shall be subject to approval of a water quality impact assessment as detailed in section 7-6-418, prior to any clearing of the site or the issuance of any building, land use or land development permit.

Sec. 7-6-415 Same -- Required Information.

A. The development review process application shall consist of the plans and studies identified below, such application forms as the Director shall require and the appropriate fees, which together shall constitute the plan of development. The plans and studies identified in this section may be coordinated or combined with other required submission materials, as deemed appropriate by the Director. The Plan of Development shall contain the following elements:

- (1) A site plan in accordance with the provisions of Chapter 5, Title 5 of this Code or other applicable law and, if applicable, a subdivision plat in accordance with the provisions of Chapter 5, Title 7 of the Code.
- (2) An environmental site assessment as detailed in section 7-6-416;
- (3) A landscape plan in accordance with the provisions of section 5-5-9(g) of this Code certified by qualified design professionals practicing within their areas of competence;
- (4) A stormwater management plan as detailed in section 7-6-417;
- (5) An erosion and sediment control plan in accordance with the provisions of Chapter 4, Title 5 of this Code;
- (6) For all development or redevelopment within an RPA or for an exception under section 7-6-420, a Water Quality Impact Assessment as detailed in section 7-6-418.

Sec. 7-6-416 Same -- Environmental Site Assessment.

- A. The environmental site assessment shall clearly delineate the following environmental features:
- (1) Tidal wetlands;
 - (2) Tidal shores;
 - (3) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams;
 - (4) Highly erodible and highly permeable soils if available from existing public documents or documents available to the applicant;
 - (5) A 100-foot buffer area located adjacent to and landward of the components listed in subsections (1) through (3) above, and along both sides of any tributary stream;
 - (6) A listing of all wetlands permits required by law (evidence that such permits have been obtained shall be presented to the Director before permits will be issued to allow commencement of grading or other on-site activity.)
- B. Wetlands delineations shall be performed consistent with current procedures promulgated by the U.S. Army Corps of Engineers and the Environmental Protection Agency.
- C. The environmental site assessment shall delineate the site-specific geographic extent of the RPA.
- D. The environmental site assessment shall be drawn at the same scale as the preliminary site plan or subdivision plat, and shall be certified as complete and accurate by a professional engineer or a certified land surveyor. This requirement may be waived by the Director when the proposed use or development would result in less than 5,000 square feet of disturbed area.
- E. In the event no part of the site plan area contains any RPA elements as enumerated in section 7-6-405(B), the applicant and a professional engineer or a certified land surveyor, may, in lieu of providing an environmental site assessment plat, so certify, in writing and under oath, to the Director. Any permit issued in reliance upon such a certification which certification is

factually inaccurate or incorrect shall be void ab initio, and such invalidity shall be in addition to any other penalties which may be imposed upon the makers of such certification.

Sec. 7-6-417 Same -- Stormwater Management Plan.

- A. A stormwater management plan shall be developed so that from the site, the post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. This peak flow rate requirement shall not apply to single-family residences separately built and not part of a subdivision, including additions or modifications to existing single-family detached residential structures. When the requirements of the City's Erosion and Sediment Control Ordinance are otherwise complied with, the Director may waive this peak flow rate requirement for other development not exceeding one-half acre of land disturbance. The Director may also waive this requirement in cases where stormwater detention would conflict with the City's flood management programs.
- B. The water quality volume from the site must be treated in a best management practice (BMP) approved by the Director. If the water quality requirements of sections 7-6-409, 7-6-410, 7-6-412 and 7-6-413 require a smaller BMP or do not require a BMP, the water quality volume treatment requirement may be waived or modified by the Director for single-family residences separately built and not part of a subdivision, including additions to existing single-family detached residential structures, and for sites not exceeding one-half acre of disturbance. The Director may waive this requirement if stormwater detention would conflict with the City's flood management programs.
- C. Post-development concentrated surface waters shall not be discharged on adjoining property, unless an easement expressly authorizing such discharge has been granted by the owner of the affected land.
- D. The owner or developer may continue to discharge storm water which has not been concentrated (sheet flow) into lower lying property if:
 - (1) The peak flow rate for a 10-year storm after

development does not exceed the predevelopment peak flow rate:

- (2) The increase in total volume of runoff caused by the development will not have an adverse impact on the lower-lying property; and
- (3) There will be no exacerbation of existing drainage problems on the lower-lying property, or other downstream property.

E. The stormwater management plan shall contain maps, charts, graphs, tables, photographs, narrative descriptions, explanations, calculations, and citations to supporting references as appropriate to communicate the information required by this article. At a minimum, the stormwater management plan must contain the following:

- (1) Location and design of all planned stormwater control devices;
- (2) Procedures for implementing non-structural stormwater control practices and techniques;
- (3) Pre- and post-development nonpoint source pollutant loadings with supporting documentation of all utilized coefficients and calculations;
- (4) Pre- and post-development peak runoff rates from the site for both a two-year storm and ten year storm, considered individually, with supporting documentation of all utilized coefficients and calculations;
- (5) For facilities, verification of structural soundness, including a professional engineer certification as applicable;

F. Site specific facilities for phased projects shall be designed for the ultimate development of the contributing project watershed based on zoning, comprehensive plans, local public facility master plans, or other similar planning documents.

G. All engineering calculations must be certified by a professional engineer and performed in accordance with procedures, consistent with good engineering practice, established by the Director pursuant to section 7-6-404(C).

- H. The plan shall establish a long-term schedule for inspection and maintenance of stormwater management facilities that includes all maintenance requirements and persons responsible for performing maintenance. If the designated maintenance responsibility is with a party other than the City of Alexandria, then a maintenance agreement shall be executed between the responsible party and the City.

Sec. 7-6-418 Same -- Water Quality Impact Assessment.

- A. The purpose of the water quality impact assessment is to:
 - (1) Identify the impacts of proposed development on water quality and lands within the RPAs;
 - (2) ensure that, where development does take place within RPAs, it will be located on those portions of the site and in a manner that will be least disruptive to the natural functions of the RPAs; and
 - (3) specify mitigation which will address water quality protection under the foregoing circumstances or under an exception under section 7-6-420.
- B. A water quality impact assessment is required for any proposed development or redevelopment in the RPA. There are two types of water quality impact assessments: water quality minor impact assessments and water quality major impact assessments.
- C. A Water Quality Minor Impact Assessment is required for development or redevelopment within RPAs or under an exception which involves 5,000 or less square feet of land disturbance. A minor impact assessment shall demonstrate, through acceptable calculations, that the remaining buffer area and necessary BMPs will result in removal of 75% of sediments and 40% of nutrients from post-development/redevelopment stormwater runoff. Such an assessment shall include a site plan which shows the following:
 - (1) Location and description of the existing characteristics and conditions of the components of the RPA as identified in section 7-6-405 of this code and delineated

in the environmental site assessment required by section 7-6-415 of this code, i.e. tidal wetlands, tidal shores, etc.;

- (2) Location and nature of the proposed encroachment into the buffer area, including: type of paving material; areas of clearing or grading; location of any structures, drives, or other impervious cover; and sewage disposal systems or reserve drainfield sites;
- (3) Type and location of proposed BMPs to mitigate the proposed encroachment.

D. A Water Quality Major Impact Assessment is required for development or redevelopment within RPAs or under an exception which involves more than 5,000 square feet of land disturbance. The following elements shall be included in a water quality major impact assessment:

- (1) All of the information required in a water quality minor impact assessment as specified above;
- (2) A hydrogeological element that:
 - (a) Describes the existing topography, soils, hydrology and geology of the site;
 - (b) Describes the impacts of the proposed development or redevelopment on topography, soils, hydrology and geology on the site;
 - (c) Indicates the following:
 - (i) Disturbance or reduction of wetlands and justification for such action;
 - (ii) Disruption or reductions in the supply of water to wetlands, streams, lakes, rivers or other water bodies;
 - (iii) Disruptions to existing hydrology, including wetland and stream circulation patterns;

- (iv) Source location and description of proposed fill material (may, at applicant's risk, be provided when U.S. Army Corps of Engineers permit application is submitted);
 - (v) Location of dredge material and location of dumping area for such material (may, at applicant's risk, be provided when U.S. Army Corps of Engineers permit application is submitted);
 - (vi) Locations of and impacts on adjacent shellfish beds, submerged aquatic vegetation, and fish spawning areas (may, at applicant's risk, be provided when U.S. Army Corps of Engineers permit application is submitted);
 - (vii) The estimated pre- and post-development pollutant loads in runoff as delineated in the stormwater management plan required by section 7-6-415;
 - (viii) Estimation of percent increase impervious surface on site and identification of the type(s) of surfacing materials to be used;
 - (ix) Percent of the site to be cleared for the project.
 - (x) Anticipated duration and phasing schedule of the construction period;
 - (xi) Listing of all requisite permits from all applicable agencies necessary to develop the project.
- (d) Describes the proposed mitigation measures for the potential hydrogeological impacts. Potential mitigation measures include:
- (i) Proposed erosion and sediment control measures, which may include minimizing the extent of the cleared area, perimeter

controls, reduction of runoff velocities, measures to stabilize disturbed areas, schedule and personnel for site inspection;

- (ii) Proposed stormwater management system;
- (iii) Creation of wetlands to replace those lost:
- (iv) Minimizing cut and fill.

(3) A supplement to the landscape plan that:

- (a) Identifies and delineates the location of all significant plant material, including all trees on site six (6) inches or greater diameter breast height. Where there are groups of trees, stands shall be outlined.
- (b) Describes the impacts the development or use will have on the existing vegetation. Information should include:
 - (i) General limits of clearing based on all anticipated improvements, including buildings, drives and utilities;
 - (ii) Clear delineation of all trees which will be removed.
 - (iii) Description of plant species to be disturbed or removed.
- (c) Describes the potential measures for mitigation. Possible mitigation measures include:
 - (i) Replanting schedule for trees and other significant vegetation removed for construction, including a list of possible plants and trees to be used;
 - (ii) Demonstration that the proposed plan will preserve to the greatest extent possible any significant trees and vegetation on the site and will provide

maximum erosion control and overland flow benefits from such vegetation;

(iii) Demonstration that indigenous plants are to be used to the greatest extent possible.

(4) Identification of the natural processes and ecological relationships inherent at the site, and an assessment of the impact of the proposed use and development of the land, including mitigating measures proposed in the water quality impact assessment, on these processes and relationships.

E. (1) A water quality minor impact assessment shall be certified as complete and accurate by a professional engineer or a certified land surveyor.

(2) The additional elements required in a water quality major impact assessment shall be certified as complete and accurate by a professional engineer and by a qualified environmental scientist.

Sec. 7-6-419 Final Plans.

(1) Final site plans and subdivision plats subject to this article for all lands within the CBPA shall include the following additional information:

(a) A copy showing issuance of all wetlands permits required by law;

(b) A maintenance agreement between the city and applicant as deemed necessary and appropriate by the Director to ensure proper maintenance of best management practices in order to assure their continued performance.

(2) Installation and Bonding Requirements.

(a) Where buffer areas, landscaping, stormwater management facilities or other specifications of an approved plan are required, no certificate of occupancy shall be issued until the installation of required plant materials or facilities is completed, in accordance with the approved site plan.

- (b) When the occupancy of a structure is desired prior to the completion of the required landscaping, stormwater management facilities, or other specifications of an approved plan, a certificate of occupancy may be issued only if the applicant provides to the City a surety bond or equivalent satisfactory to the Director in amount equal to the remaining plant materials, related materials, and installation costs of the required landscaping or facilities and/or maintenance costs for any required stormwater management facilities during the construction period.
- (c) Unless otherwise approved by the Director for a phased project, all required landscaping shall be installed and approved by the first planting season following issuance of a certificate of occupancy or the surety bond may be forfeited to the City.
- (d) Unless otherwise approved by the Director for a phased project, all required stormwater management facilities or other specifications shall be installed and approved within 18 months of project commencement. Should the applicant fail, after proper notice, to initiate, complete or maintain appropriate actions required by the approved plan, the surety bond may be forfeited to the City. The City may collect from the applicant the amount by which the reasonable cost of required actions exceeds the amount of surety held.
- (e) After all required actions of the approved site plan have been completed, the applicant must submit a written request for a final inspection. If the requirements of the approved plan have been completed to the satisfaction of the Director, such unexpended or unobligated portion of the surety bond held shall be refunded to the applicant or terminated within 60 days following the receipt of the applicant's request for final inspection. The Director may require a certificate of substantial completion from a professional engineer or licensed surveyor before making a final inspection.

Sec. 7-6-420 Exceptions.

- A. Unless otherwise provided in this article, a request for an exception to the requirements of this article shall be made pursuant to this section in writing to the Director. The request shall identify the impacts of the proposed exception on water quality and on lands within the RMA and RPA through the performance of a water quality impact assessment which complies with the provisions of section 7-6-418 to the extent applicable.

- B. The Director shall review the request for an exception and the water quality impact assessment and may grant the exception with such conditions and safeguards as deemed necessary to further the purpose and intent of this article if the Director finds that the applicant has demonstrated by a preponderance of the evidence that:
 - (1) granting the exception will not confer upon the applicant any special privileges that are denied to other property owners in the CBPA Overlay District;
 - (2) the exception is not based upon conditions or circumstances that are self-created or self-imposed, nor does the exception arise from conditions or circumstances either permitted or nonconforming that are related to adjacent parcels;
 - (3) the exception is the minimum necessary to afford relief;
 - (4) the exception will be consistent with the purpose and intent of the Overlay District, and not injurious to water quality, the neighborhood or otherwise detrimental to the public welfare; and
 - (5) due to the particular physical surroundings, shape, topographical condition, geotechnical characteristics of the site's soils and rock materials or other extraordinary situation or condition of the specific property involved, the strict application of the requirements of this article would effectively prohibit or unreasonably restrict the utilization of the property or would constitute a clearly demonstrable hardship approaching

confiscation.

- C. Any person aggrieved by a decision of the Director under this section may appeal to the planning commission as provided in section 7-6-421.

Sec. 7-6-421 Appeals.

- A. Any person aggrieved by a final case decision of the Director in the administration, interpretation or enforcement of this article or on any application hereunder may appeal such decision to the planning commission, by filing a notice of appeal, in writing, stating the grounds of appeal, with the secretary of the planning commission within 14 days of the issuance of such decision; provided, that any person aggrieved, who had no actual knowledge of the issuance of such decision, may file an appeal within 14 days of the last day on which notice provided in section 7-6-303 or section 5-5-15(c) is given for any element of the plan of development. A notice of appeal shall be accompanied by a filing fee of \$100.00.
- B. The planning commission shall conduct a public hearing on any appeal filed pursuant to subsection A, notice for which shall be provided in accordance with the applicable provisions of article P of this chapter. Following the conclusion of the hearing, the commission may affirm, reverse or modify the decision of the director, or vacate the decision and remand the matter to the director for further consideration.
- C. Any person aggrieved by a decision of the planning commission issued pursuant to subsection B may appeal the decision to the city council, by filing a notice of appeal, in writing, stating the grounds of appeal, with the city clerk within 14 days of the issuance of the decision.
- D. The city council shall conduct a public hearing on any appeal filed pursuant to subsection C, notice for which shall be provided in accordance with the applicable provisions of article P of this chapter. Following the conclusion of the hearing, the council may affirm, reverse or modify the decision of the commission, or vacate the decision and remand the matter to the commission or the director for further consideration.

Sec. 7-6-422 Noncomplying Use Status and Related Matters.

A. Any land use or land development lawfully existing on January 28, 1992, and any land use or land development for which a final site plan, approved on or before January 28, 1992, continues in force and effect, which does not comply with the provisions of this article, shall be deemed a noncomplying land use or land development. A noncomplying land use or land development, if not lawfully existing on January 28, 1992, may retain its noncomplying status and be constructed without compliance with this article and in accordance with its approved final site plan, any minor amendments thereto approved by the Director, and any non-minor amendments thereto approved by the planning commission or city council, as applicable, so long as such non-minor amendments do not, individually or in the aggregate, cause either a net increase in impervious surface or any additional encroachment into RPA over the level of imperviousness or encroachment associated with the land use or land development as previously approved; provided, that any such non-minor amendments shall comply with the provisions of this article to the maximum extent feasible. If existing or when constructed, a noncomplying land use or land development shall be permitted to continue indefinitely and shall be considered a legal land use or land development, but shall be subject to the following restrictions:

- (1) Expansion. No noncomplying land use or land development may be physically enlarged or expanded unless such enlargement or expansion complies with the provisions of this article, and any other applicable provisions of law.
- (2) Reconstruction. If a noncomplying land development is destroyed, demolished or otherwise removed, it may be reconstructed; provided, that such reconstruction shall be categorized as development or redevelopment, as the case may be, and shall comply with the provisions of this article and any other applicable provisions of law.
- (3) Repairs and maintenance. A noncomplying land development may be remodeled, renovated, maintained, repaired and altered so long as such work complies with the provisions of

this article, and any other applicable provisions of law.

- B. Unless deemed a noncomplying land use or land development under subsection A, or unless granted an exemption pursuant to section 7-6-423, any land use or land development subject to this article which is the object of any land use, land development or construction permit application, including a renewal or extension application, pending before any department, board or commission of the city, before the city council, or on judicial review on January 28, 1992, or thereafter filed with any such department, board or commission, shall comply with the provisions of this article.
- C. Unless deemed a noncomplying land use or land development under subsection A, or unless granted an exemption pursuant to section 7-6-423, any land use or land development subject to this article which is the object of a land use, land development or construction permit approval in force and effect on January 28, 1992, shall comply with the provisions of this article. Any renewal or extension of any such approval shall comply with the provisions of this article.
- D. For purposes of this section, a land development for which a special use permit has been issued under section 7-6-28(i), -30(k), -31(k), -35(m) or -44(h) of this code and recorded among the land records of the city prior to January 28, 1992, and for which no final site plan is required to be filed subsequent to the recordation of the permit, shall be considered as being the object of a final site plan approved prior to January 28, 1992.

Sec. 7-6-423 Determination of Undue Hardship Exemption.

- A. Upon application, the Director may exempt from the provisions of this article a specific development which, on January 28, 1992, is the object of an approved preliminary site plan, including a preliminary site plan approved along with a special use permit granted under section 7-6-355, whenever the Director finds that the applicant has demonstrated that full application of the provisions of this article would result in undue hardship under the standards set out in subsection B; provided, that the provisions of subsection G shall apply to any development for which an

exemption is granted under this section.

B. Standards. In considering whether an applicant has demonstrated undue hardship , the Director shall consider the following standards where applicable:

1. Whether the applicant has in good faith relied to his detriment on the preliminary site plan approval prior to January 28, 1992, in a manner that makes it inequitable to enforce the terms of this article with respect to the applicant's property.
2. The extent to which the applicant has, prior to January 28, 1992, and in reliance on the preliminary site plan approval, made a substantial commitment of money or resources directly associated with physical improvements on the land, such as grading, excavation, installation of utility infrastructure or other public improvement, or for the design of specific buildings and improvements to be constructed on the site.
3. The extent to which the applicant has, prior to January 28, 1992, and in reliance on the preliminary site plan approval, secured permits for, and commenced or completed, the construction of site improvements and buildings in part but not all of a development that was contemplated to extend over a period of months or years.
4. Whether the applicant has, prior to January 28, 1992, and in reliance on the preliminary site plan approval, made contractual commitments to complete buildings and deliver title thereto or occupancy thereof.
5. Whether the applicant has, prior to January 28, 1992, and in reliance on the preliminary site plan approval, incurred financial obligations to a lending institution which the applicant will be unable to meet unless he is permitted to proceed with the proposed development.
6. Whether enforcement of the terms of this article will expose the applicant to substantial monetary liability to third persons.

7. Whether undue hardship has been demonstrated only with respect to an identifiable and discrete portion of the proposed development.
- C. The fact that the property has been or is in a particular zoning classification under this chapter, or any prior zoning ordinance of the city, or that a specific development plan has or has not been approved, shall not, in itself, establish undue hardship.
- D. Any person, firm, or corporation having an ownership interest in property may file an application for a determination of undue hardship. Such application shall be filed with the Director, shall contain a recital of the facts which are claimed to support the application, and shall contain such other information as the Director may specify.
- E. A reasonable opportunity for written public comment on an application shall be afforded by the Director.
- F. Within 30 days after the close of the comment period, the Director shall issue a decision on the application and shall serve the same by certified mail on the applicant and any commentators who have so requested. Such decision shall contain written findings of fact and, if applicable, conclusions of law.
- G. In granting an exemption pursuant to this section, the Director shall require that the previously approved development comply with the provisions of this article to the maximum extent feasible.
- H. Nothing in this section shall be construed as excusing a land development granted an exemption pursuant to subsection A from any of the conditions imposed in conjunction with the development's preliminary site plan approval, or any other approval, including where applicable those imposed by this code, and any exemption shall itself be conditioned upon the satisfaction of all such conditions not waived or modified by the Director.
- I. A land development granted an exemption pursuant to subsection A may retain its exemption and be constructed in accordance with its approved preliminary site plan and the provisions of this

article imposed by the Director pursuant to subsection G, with any minor amendments to that site plan approved by the Director, and with any non-minor amendments thereto approved by the planning commission or city council, as applicable, so long as such non-minor amendments do not, individually or in the aggregate, cause either a net increase in impervious surface or any additional encroachment into RPA over the level of imperviousness or encroachment associated with the land development as previously approved; provided, that any such non-minor amendments shall comply with the provisions of this article to the maximum extent feasible.

- J. For purposes of this section, a land development for which a special use permit has been issued under section 7-6-28(i), -30(k), -31(k), -35(m) or -44(h) of this code and recorded among the land records of the city prior to January 28, 1992, and for which one or more final site plans are required to be filed subsequent to the recordation of the permit, shall be considered as being the object of an approved preliminary site plan approved prior to January 28, 1992; provided, that any such land development or portion thereof for which a required final site plan has been approved prior to January 28, 1992, shall be considered, for purposes of section 422, as being the object of a final site plan approved prior to January 28, 1992.

Section 2. That this ordinance shall become effective upon the date and at the time of its final passage.

PATRICIA S. TICER
Mayor

Final passage: January 28, 1992