

November 21, 2003

TO: The County Board of Arlington, Virginia

FROM: Ron Carlee, County Manager

SUBJECT: 1. Expand and Enhance the Green Building Incentive Program.

2. Request to Advertise "On the County Board's Own Motion" public hearings on a proposed Zoning Ordinance amendment to Section 36. Administration and Procedures of the Arlington County Zoning Ordinance to amend the requirements for environmental statements that are part of use permit and site plan applications to require a LEED™ Scorecard submittal with associated information.

**RECOMMENDATION:** 1. **Extend and expand the County's Green Building Incentive Program (Attachment A) to evaluate special exception site plan requests for bonus density consistent with Section 36.H.5.a.(1) of the Zoning Ordinance for an additional five years. The extended program would sunset on January 1, 2009.**

2. **Authorize the advertisement of public hearings on proposed amendments to Section 36 of the Arlington County Zoning Ordinance, by the Planning Commission on January 26, 2004, and the County Board on February 7, 2004.**

**ISSUES:** Determining the appropriate mix of community benefits for site plan projects.

Ensuring the long-term environmental sustainability of the community.

**SUMMARY:** It is proposed that Arlington strengthen its commitment to sustainable communities and green buildings by enhancing the existing green building incentive program and requiring more detailed evaluation of green building components as part of the site plan application process. The major elements of the proposed revisions are the following:

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Reviewed by the County Attorney's Office: \_\_\_\_\_  
County Board Meeting – December 6, 2003  
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- Requirement that all projects have a LEED™ accredited professional on the development team.
- Establishment of the expectation that all projects will include evaluation of all LEED™ components through the submission a LEED™ scorecard with an explanation of each LEED™ credit, describing how the project will achieve each credit, or why it cannot.
- Incorporation of an appropriate number of LEED™ components in a site plan condition with reporting and compliance linked to specific permit applications throughout the demolition and construction process.
- The continuation of up to .25 density bonus for achieving a silver rating, plus new options to potentially achieve up to .15 bonus for a certified building and up to .35 for a platinum rating.
- Application of the green building provisions to all project types instead of just commercial office.
- The establishment of a Green Building Fund with a contribution from site plan projects of \$0.03 per square foot of GFA. The contribution would be refunded or waived if a developer applies for and obtains formal certification of the project from the US Green Building Council. Alternatively the fund will provide resources for additional education, outreach and support on green building issues.

The proposed Zoning Ordinance amendment formalizes the requirement to submit the LEED™ Scorecard along with more detailed documentation on the green components incorporated into the project, thus providing staff with more information with which to evaluate and enforce the environmental components of the project. The proposed incentives and enhanced documentation requirements confirm Arlington's commitment to environmentally conscious design and construction and the maintenance of community sustainability.

**DISCUSSION:** This report proposes enhancing and upgrading the current green building density program. Originally adopted in October 1999, the existing program offers additional density (up to .25 FAR) if a site plan project commits to achieving the LEED™ silver standard. This density incentive program has been recognized nationally as a creative way to encourage environmentally friendly development. However, restricting the program to commercial office projects achieving the LEED™ silver standard is very limiting. It excludes developers who are interested in incorporating PLA-

green building components but who are not prepared to achieve the silver rating. The existing program also does not apply to multi-family residential projects, rehabilitation of existing buildings, or other types of development, even though the LEED™ rating system can be used to measure the “greenness” of a variety of types of development. Since the County instituted its pilot program, these other options are more accessible, and staff therefore recommends expanding the program to include them.

The proposed incentive program is outlined in Attachment A. It is designed to encourage a broader spectrum of projects to participate in the incentive program. It expands the density incentive program to include the full range of LEED™ awards (including certified, silver, gold, and platinum) and would award a density increase to the project in an amount commensurate with the applicant’s level of commitment to sustainable building (ranging from a maximum .15 FAR for a LEED™ certified project to a maximum .35 FAR for a platinum project). All types of projects (not just commercial office) would be eligible for the expanded density bonus program.

The second component of the proposed green building incentive program involves the establishment of a Green Building Fund (“Fund”) and a policy of having those site plan developers who do not commit to achieving a LEED™ rating from the U.S. Green Building Council (USGBC) contribute to the Fund. The contribution will be calculated at a rate of \$0.03 per square foot. This contribution calculation is based on the fees assessed by the USGBC for registration and evaluation of a formal LEED™ application. The Green Building Fund would be used to provide education and outreach to developers and the community on green building issues. If a project achieves 26 or more points and the developer receives LEED™ certification from the USGBC, the Fund contribution would be refunded upon receipt of the final LEED™ certification.

In addition to the green building incentive enhancements, the Zoning Ordinance amendment proposed for advertisement in this report would clarify the environmental information required for use permits and site plans. Currently, the information required by the Zoning Ordinance is submitted in the “Environmental Considerations” section of the site plan application. The information requested needs revision due the following deficits:

- It is general and qualitative.
- It does not capture all of the goals of an environmentally sound and sustainable community.
- Much of the requested information duplicates the requirements of the Chesapeake Bay Preservation Ordinance.
- It does not require information about the construction practices, materials and systems of the project.

As part of the original green building pilot program, applicants were required to submit PLA-

the LEED™ Scorecard as part of the site plan application. This provided staff with an opportunity to discuss various green building components with the applicant, but did not enforce the incorporation of environmentally responsible technologies or processes in the project.

This proposal would advertise amendments to the Zoning Ordinance that would require developers to complete the LEED™ Scorecard with an explanation of each LEED™ credit, describing how they intend to achieve the credit, or why they are unable to incorporate the component into the project. This information, along with the Chesapeake Bay Preservation Ordinance information, will provide staff with a more comprehensive analysis of the project's environmental impact.

All projects are required to have a LEED™ accredited professional on the development team and will be expected to fully evaluate all LEED™ components and incorporate an appropriate number of LEED™ components to minimize the environmental impact of the project on the site and the community. A specific number of LEED™ credits will be identified and included in a site plan condition with reporting and compliance linked to specific permit applications throughout the demolition and construction process.

The Zoning Ordinance amendment in this report is proposed to amend, reenact and recodify Subsection 36 of the Arlington County Zoning Ordinance, requiring information provided for use permits and site plans, to facilitate the creation of an environmentally sound and sustainable community; to encourage economic development; and other reasons required by the public necessity, convenience and general welfare and good zoning practice. Therefore, it is recommended that the County Board authorize the advertisement of public hearings by the Planning Commission on January 26, 2004 and by the County Board on February 7, 2004 for the proposed Zoning Ordinance amendment to Section 36 Administration and Procedures.

**BACKGROUND:** "Green buildings" are defined as structures and their surrounding landscapes that are designed, constructed, operated, and dismantled in an environmentally responsible manner to minimize short- and long-term negative impacts on the environment. Green buildings not only provide owners and occupants with energy and water savings, good indoor air quality, and healthy, pleasant and productive surroundings, but also benefit the community by being resource-efficient and by conserving energy. Green buildings require a holistic approach from beginning sketches to final design to a functioning building. One way to educate developers about green buildings and to encourage developers to integrate sustainable elements into site plan projects beginning at project conception is through submission of the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED™) Green Building Rating Scorecard as part of the site plan application process. The LEED™ green building rating system is the tool that is being used to measure the "greenness" of projects in Arlington.

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Arlington is a national leader in the green building community. Arlington strives for a silver LEED™ standard wherever possible in public buildings. As evidence of this commitment, in September 2003, the Langston-Brown School and Community Center was the first project in Virginia to earn LEED™ green building certification from the USGBC. In addition, Arlington County, in partnership with Charles E. Smith and the Virginia Department of Conservation and Recreation, just completed the installation of a vegetated roof retrofit on a portion of the County's Courthouse Plaza building.

In October 1999, the County Board adopted the Pilot Green Building Incentive Program to encourage the private sector to construct more environmentally-friendly buildings and to recognize that environmentally-friendly buildings have fewer adverse effects on the community. This original program applied only to commercial office space and offered up to .25 FAR bonus density in exchange for obtaining a LEED™ silver certification from the USGBC. One project, the Navy League, was granted additional density in exchange for committing to achieve a silver LEED™ award under this program. The proposed enhancements to the green building incentive program expand this incentive program to include a broader range of building types and LEED™ levels. The proposed Green Building Fund would provide an additional incentive to strive for LEED™ green building certification.

In order to standardize the evaluation of green buildings, the USGBC continues to refine the LEED™ Green Building Rating System. Experts from all segments of the building industry are included in the development of the rating system, including product manufacturers, environmental groups, building owners, building professionals, utilities, local government, research institutions, professional societies, and universities. The LEED™ Green Building Rating System is a voluntary, consensus-based, market-driven building rating system based on existing proven technology. It evaluates environmental performance from a "whole building" perspective over a building's life cycle, providing a definitive standard for what constitutes a "green building".

LEED™ is based on accepted energy and environmental principles and strikes a balance between known effective practices and emerging concepts that emphasize state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED™ is a system designed for rating new and existing commercial, institutional, and high-rise residential buildings. It is a feature-oriented system where credits are earned for satisfying each criterion. Different levels of green building certification (certified, silver, gold, and platinum) are awarded based on the total credits earned.<sup>1</sup> The project team, including a LEED™ accredited professional, evaluates the project based on the LEED™ system and

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<sup>1</sup> Credits required for LEED™ certification are as follows: Certified – 26-32 credits; Silver – 33-38 credits; Gold – 39-51 credits; Platinum – 52-69 credits.  
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determines a specific number of credits to be achieved. The developer submits required documentation for the building to the USGBC outlining the project's green components. The USGBC evaluates the submission and certifies the project at a specific award level. The system is designed to be comprehensive in scope, yet simple in operation.

During the County's Green Building Pilot (April 2000 – December 2003), all developers were required to submit the USGBC LEED™ Scorecard as part of the site plan process. This proved to be a useful tool, and staff would like to formalize the submission of the LEED™ Scorecard as part of the Zoning Ordinance.

**FISCAL IMPACT:** Fully implementing this enhanced green building program is not possible in the long term without additional staff resources given the current rate of new site plan projects coming to the County. The program will require careful review of site plans and follow-up work throughout construction to ensure compliance with site plan conditions related to green building components. In addition, management of the Green Building Fund and associated educational and outreach programs will require additional staff time. These needs will have to be balanced against other competing priorities during annual budget deliberations. Absent staff oversight, developers will be responsible for self-enforcement.

**CONCLUSION:** The enhancements to Arlington's green building incentive program are designed to ensure that Arlington remains a sustainable community, particularly as the density of development in the County continues to increase, by reducing the environmental impacts of development. First, offering a density incentive to a broader range of projects will encourage more projects to obtain LEED™ certification, thus ensuring that projects continue to reduce the environmental impacts of growth. The existing incentive program, which offers density to LEED™ silver projects, has been very effective in educating developers about the benefits of green buildings, but has resulted in only one LEED™ project (the Navy League). Offering a smaller density bonus to projects that are willing to "stretch" to achieve a certified LEED™ rating will result in more "green" buildings and reduced environmental impact. Second, the proposed Green Building Fund provides an additional incentive to builders to consider official USGBC LEED™ certification, since each project will have to contribute to the Fund if it doesn't seek certification from the USGBC. Funds collected will be used for education and outreach for developers and community members.

RESOLUTION TO AUTHORIZE THE ADVERTISEMENT OF PUBLIC HEARINGS ON THE PROPOSED ZONING ORDINANCE AMENDMENTS TO SECTION 36 ADMINISTRATION AND PROCEDURES OF THE ARLINGTON COUNTY ZONING ORDINANCE TO AMEND THE REQUIREMENTS FOR ENVIRONMENTAL STATEMENTS THAT ARE PART OF USE PERMIT AND SITE PLAN APPLICATIONS TO REQUIRE A LEED™ SCORECARD SUBMITTAL WITH ASSOCIATED INFORMATION.

The County Board of Arlington hereby resolves that the following amendments to Section 36 Administration and Procedures of the Arlington County Zoning Ordinance to amend requirements for environmental statements that are part of use permit and site plan applications be advertised for public hearings by the Planning Commission on January 26, 2003, and by the County Board on February 7, 2004, in order to facilitate the creation of an environmentally sound and sustainable community; to encourage economic development; and for other reasons required by the public necessity, convenience and general welfare and good zoning practice.

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## SECTION 36. ADMINISTRATION AND PROCEDURES

### G. Use Permits

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5. Every applicant for a use permit which would allow the construction of: ~~(1) a new structure; or (2) a parking area for more than ten (10) automobiles;~~ shall file with his application information as defined in Section 36, paragraph J.

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### J. Use Permit and Site Plan Information.

1. Every applicant who files an application for a site plan approval or a use permit, as defined in Section 36, paragraphs G.5. and H.8., shall provide a completed LEED™ scorecard or other comparable reporting mechanism that is acceptable to the County Manager as part of the site plan or use permit application. The applicant shall analyze the LEED™ credits for various components of sustainable design and describe how and/or why each credit can or cannot be achieved. ~~information on forms approved by the county manager as to the effects of the proposed development in the following areas:~~

- ~~a. Storm water runoff.~~
- ~~b. Erosion, stream sedimentation.~~
- ~~c. Vegetation.~~
- ~~d. Noise levels.~~
- ~~e. Air quality.~~
- ~~f. Solid waste production and disposal.~~

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- ~~g. Health and safety hazards.~~
- ~~h. Existing use of surrounding land.~~
- ~~i. Traffic and parking generation.~~
- ~~j. Unique natural features.~~

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