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Title: AN ORDINANCE requiring the use of green building and sustainable development practices in all King County capital projects that meet certain requirements; amending Ordinance 16147, Section 2, as amended, and K.C.C. 18.17.010, Ordinance 16147, Section 3, as amended, and K.C.C. 18.17.020, Ordinance 16147, Section 4, and K.C.C. 18.17.030 and Ordinance 16147, Section 3, as amended, and K.C.C. 18.17.020 and repealing Ordinance 16147, Section 4, Ordinance 17166, Section 7, and Ordinance 17420, Section 74.

Sponsors: Larry Phillips

Indexes: capital projects

Code sections: 18.17.010 - *, 18.17.020 - .

Attachments: 1. Ordinance 17709.pdf, 2. 2013-0324 Fiscal Note.xls, 3. 2013-0324 transmittal letter.doc, 4. 2013-0324 Staff report - Green Building Update 12-03-2013 doc, 5. 2013-0324 Attachment 4 - Striking Amendment (11-26-13).docx, 6. 2013-0324 Attachment 5 - T1 Amendment (11-19-13).docx, 7. 2013-0324 REVISED Staff Report - Green Building Update 12-03-13.doc

| Date | Ver. | Action By | Action | Result |
|-----------|------|--|--------------------------------|--------|
| 12/9/2013 | 2 | Metropolitan King County Council | Hearing Held | |
| 12/9/2013 | 2 | Metropolitan King County Council | Passed | Pass |
| 12/3/2013 | 1 | Transportation, Economy, and Environment Committee | Recommended Do Pass Substitute | Pass |
| 7/22/2013 | 1 | Metropolitan King County Council | Introduced and Referred | |

Clerk 12/05/2013

AN ORDINANCE requiring the use of green building and sustainable development practices in all King County capital projects that meet certain requirements; amending Ordinance 16147, Section 2, as amended, and K.C.C. 18.17.010, Ordinance 16147, Section 3, as amended, and K.C.C. 18.17.020, Ordinance 16147, Section 4, and K.C.C. 18.17.030 and Ordinance 16147, Section 3, as amended, and K.C.C. 18.17.020 and repealing Ordinance 16147, Section 4, Ordinance 17166, Section 7, and Ordinance 17420, Section 74.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. Findings:

A. Green building and sustainable development practices support the goals of the King County Strategic Plan, including, but not limited to, growth management, economic development, historic preservation, fiscal responsibility, environmental protection, access to public transportation, social equity, stewardship of resource lands, climate change initiatives, efficient energy and other natural resource uses, preserving fish and wildlife habitat, reducing and creating resources from wastes and protecting and improving citizen health.

B. Green building and sustainable development policies are also included in the King County Comprehensive Plan, which calls for the incorporation of sustainable practices into the design, construction and operation of King County capital improvement projects. Sustainable and green building practices can reduce greenhouse gas emissions, reduce pollution, reduce the use of natural resources, reduce energy and other operating costs, enhance asset value, optimize performance, promote cultural sustainability by preserving historic resources and create healthier and more appealing environments for the visiting public and for King County employees.

C. King County has shown leadership in establishing climate protection goals and energy conservation goals through the completion of its Strategic Climate Action Plan. The built environment plays a significant role in greenhouse gas emissions and energy consumption. Green building has made significant contributions to reducing energy and the consumption of materials, both of which are two key goal areas of the Strategic Climate Action Plan.

D. Ordinance 16147, adopted June 23, 2008, established a green building policy for all King County buildings, renovations and remodel projects. It requires that projects seek the United States Green Building Council's Leadership in Energy and Environmental Design ("LEED") certification whenever possible. The LEED rating system is a nationally recognized system for rating the performance of buildings and to guide project design. A study done by the Pacific Northwest National Laboratory found that LEED certified

buildings operated by the United States General Services Administration used twenty-five percent less energy than the national average and cost nineteen percent less to operate. Ordinance 16147 expires December 31, 2013.

E. King County currently has twenty-one projects registered with the United States Green Building Council. Two buildings have achieved LEED Platinum certification, including Shoreline Recycling and Transfer Station in 2008 and the Brightwater Education and Community Center in 2012. By continuing and building on the green building policies in the current ordinance, the county will further its sustainability goals.

F. In addition to LEED certification, King County recognizes the value of alternative sustainable development certifications, such as: the Evergreen Sustainable Development Standard administered by the Washington state Department of Commerce; the Built Green Four-Star administered by the Master Builders Association of King and Snohomish counties; the Sustainable Sites Initiative Program developed by the American Society of Landscape Architects and Lady Bird Johnson Wildflower Center and United States Botanical Garden; Salmon Safe founded by the Stewardship Partners; and the Living Building Challenge administered by the International Living Future Institute.

G. King County has also shown its commitment to incorporating green building and sustainable development practices in capital improvement projects for projects where LEED certification is not applicable, including bus passenger shelters, trails, park facilities, restroom facilities, pump stations, parking garages, roads, sidewalks, bridges, flood control improvements, conveyance lines and rehabilitation of designated landmarks or properties that are eligible for landmark designation.

H. King County develops, owns and operates many facilities that require ongoing operation and maintenance. Designing, operating and maintaining these facilities using green and sustainable practices can reduce operating and maintenance costs, conserve energy, reduce greenhouse gas emissions and improve indoor air quality.

I. Ensuring that public funds are expended in the most beneficial way necessitates careful consideration

and accounting of the costs of construction, operations and maintenance of all county facilities.

J. On September 9, 2013, the King County council approved Motion 13969, which amended the King County auditor's office work program to include a review of the county's green building ordinance and the life-cycle cost analysis model used to evaluate potential green building features.

SECTION 2. Ordinance 16147, Section 2, as amended, and K.C.C. 18.17.010 are each hereby amended to read as follows:

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

A. "Capital project" refers to a project with a scope that includes one or more of the following elements: acquisition of a site or acquisition of an existing structure, or both; program or site master planning; environmental analysis; design; construction; major equipment acquisition; reconstruction; demolition; or major alteration of a capital asset. A capital project shall include: a project program plan; scope; budget by task; and schedule.

B. "County green building team" or "green building team" means a group that includes representatives from county agencies with capital project or building management staff including, but not limited to, the department of transportation, the department of natural resources and parks, the department of executive services, the department of permitting and environmental review, the department of public health ~~((and))~~, the historic preservation program ~~((in the office of business relations and economic development))~~ and the department of community and human services. The members represent staff with expertise in project management, construction management, architecture, landscape architecture, environmental planning, design, engineering, historic preservation and resource conservation, public health, building energy systems, building management, budget analysis and other skills as needed. The green building team provides assistance and helps to disseminate information to project managers in all county agencies.

C. "Facility" means all or any portion of buildings, structures, infrastructure, sites, complexes,

equipment, utilities and conveyance lines.

D. "GreenTools program" means the support team located within the solid waste division of the department of natural resources and parks that provides green building technical assistance to county divisions, cities and the general public within King County.

E. "~~((Integrated))~~ Integrative design process" means an approach to project design that seeks to achieve high performance on a wide variety of well-defined environmental and social goals while staying within budgetary and scheduling constraints. It relies on a multidisciplinary and collaborative team whose members make decisions together based on a shared vision and a holistic understanding of the project. It is an iterative process that follows the design through the entire project life, from predesign through operation.

F. "Leadership in Energy and Environmental Design" or "LEED" means a voluntary, consensus-based national standard for developing high-performance, sustainable buildings, created by the United States Green Building Council. ~~((A LEED certification is available for: new construction and major renovation projects, which is LEED-NC; existing building operations, which is LEED-EB; commercial interior projects, which is LEED-CI; and core and shell projects, which is LEED-CS. LEED certifications that are in the pilot phase now include LEED for Homes and LEED for Neighborhood Development.))~~

G. "LEED-eligible building" means a ~~((new construction))~~ project larger than five thousand gross square feet of occupied or conditioned space ~~((as defined in the Washington state energy code, which is chapter 51-11 WAC, or a major building remodel or renovation project))~~ that meets the minimum program requirements for LEED certification.

H. "Major remodel or renovation" means work that demolishes space down to the shell structure and rebuilds it with new interior walls, ceilings, floor coverings and systems, when the work affects more than twenty-five percent of a LEED-eligible building's square footage and the affected space is at least ~~((five-thousand))~~ five thousand square feet or larger.

I. "Minor remodel or renovation" means any type of remodel or renovation that does not qualify as a

major remodel or renovation.

J. "New construction" means a new building or structure.

K. "Present value" means the value on a given date of a future payment or series of future payments, discounted to reflect the time value of money and other factors such as investment risk.

L. "Retrocommissioning" is a detailed, systematic process for investigating an existing building's operations and identifying ways to improve performance. The primary focus is to identify operational improvements to obtain comfort and energy savings.

M. "Sustainable development practices" means whole system approaches to the design, construction and operation of buildings and infrastructure that help to mitigate the negative environmental, economic, health and social impacts of construction, demolition, operation and renovation while maximizing the facilities' positive fiscal, environmental and functional contribution. Sustainable development practices recognize the relationship between natural and built environments and seek to minimize the use of energy, water and other natural resources while providing maximum benefits and contribution to service levels to the system and the connecting infrastructures.

N. "Sustainable infrastructures" means those infrastructures and facilities that are designed, constructed and operated to optimize fiscal, environmental and functional performance for the lifecycle of the facility. Sustainable performance of infrastructure shall be determined through an integrated assessment, one that accounts for fiscal, environmental and functional costs and benefits, over the life of the facility.

O. "Sustainable Infrastructure Scorecard" is an alternative green building and sustainable development rating system developed by the county green building team as required by K.C.C. 18.17.020.E. The Sustainable Infrastructure Scorecard was developed for capital projects that are not eligible for the LEED rating system.

SECTION 3. Ordinance 16147, Section 3, as amended, and K.C.C. 18.17.020 are each hereby amended to read as follows:

A. The intent of this policy is to ensure that the planning, design, construction, remodeling, renovation, maintenance and operation of any King County-owned or financed capital project is consistent with the latest green building and sustainable development practices.

B. This policy applies to all King County-owned or lease-to-own capital projects, excluding projects that have already completed thirty percent of the design phase by ~~((June 23, 2008))~~ the effective date of this section.

C. All capital projects to which this chapter applies shall utilize relevant ~~((LEED))~~ green building and sustainable development criteria to implement sustainable development practices in planning, design, construction and operation as set forth in this chapter.

D. All LEED-eligible new construction and major remodels and renovations shall be registered through the United States Green Building Council and should plan for and achieve a LEED Gold certification, as long as a Gold certification can be achieved with no incremental cost impact to the ~~((current expense))~~ general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset, as compared to a project that is not seeking ~~((an LEED rating))~~ a green building or sustainable development rating system certification. ~~((At or before the project has reached thirty percent of the design phase, the project team shall conduct an analysis that determines the incremental costs for achieving a LEED Gold rating as compared to a building that is not seeking a green building or sustainable development rating system certification. The analysis shall include the up-front incremental construction costs, the up-front costs of registration and certification and the present value of operations and maintenance cost savings over the life of the asset. For the purposes of this analysis, operations and maintenance cost savings shall be comprised of projected costs the county will incur over the life of the asset. The costs included in this analysis shall be quantifiable, documented and verifiable by third-party review upon project completion and thereafter.~~

~~At thirty percent of the design phase, the project team shall also provide a summary discussion of the LEED points that the project will achieve and the LEED points that are technically infeasible for the project to~~

obtain.

For projects achieving a LEED rating, the project team shall ensure that energy efficiency is given the highest priority. Project teams shall submit a completed LEED checklist, which documents which LEED points the project team expects to achieve, to the green building team, initially at the schematic or thirty percent design phase of the project and then at the completion of the project.

If it is determined that costs are too high to achieve a LEED Gold rating, or that the project is unable to achieve that rating for technical reasons, projects shall achieve the highest rating possible with no incremental cost impact to the current expense fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset as compared to a project that is not seeking a green building or sustainable development rating system certification. There may be extenuating circumstances for some LEED-eligible projects that make it cost prohibitive to achieve any level of LEED certification. These projects must submit a written summary to the director of the department managing the project for approval, documenting the reasons why the project is not getting a LEED certification.)) The incremental cost impact shall be determined as described in subsection F. of this section.

E. All capital projects, where the scope of the project or type of structure limits the ability to achieve LEED certification, shall incorporate cost-effective green building and sustainable development practices based on relevant LEED criteria and other applicable sustainable development goals and objectives. These projects shall use ((a project scorecard that is to be developed by the green building team)) the King County or division-specific Sustainable Infrastructure Scorecard, along with guidelines for using the scorecard. ((The project scorecard and guidelines will be developed by the green building team in conjunction with divisions that have capital project or building management staff and the GreenTools technical support team. Project teams shall submit a completed project scorecard to the green building team, initially at the schematic or thirty percent design phase of the project and then at the completion of the project.)) Each Sustainable Infrastructure Scorecard project shall plan for and achieve a Platinum rating as long as a Platinum rating can be achieved with

no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset as compared to a project not achieving a green building or sustainable development rating. The incremental cost impact shall be determined as described in subsection F. of this section. If a Platinum rating cannot be achieved with no incremental cost impact to the general fund and an incremental cost impact of no more than two percent to other funds over the life of the asset as compared to a project not achieving a green building or sustainable development rating, a Sustainable Infrastructure Scorecard project shall plan for and achieve a Gold rating. If a Gold rating cannot be achieved with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset, Sustainable Infrastructure Scorecard projects shall plan for and achieve a silver rating where practicable. Silver is the lowest allowable rating for Sustainable Infrastructure Scorecard projects. For small, related capital projects (~~((with construction costs of less than seven hundred and fifty thousand dollars each))~~) that are implemented as part of a program, ~~((the))~~ a project scorecard and reporting requirements may be done for the program rather than for each individual small project. For reporting purposes, county divisions may apply a single Sustainable Infrastructure Scorecard for a bundle of small capital projects in the most efficient manner as determined by the county division director to reflect the division's line of business.

F.1. For each project subject to subsection D. or E. of this section, at or before the time the project has reached thirty percent of the design phase, the project team shall conduct an analysis that determines the incremental costs for achieving the rating required in subsection D. or E. of this section as compared to a project that is not seeking a green building or sustainable development rating system certification. The analysis shall include the up-front incremental construction costs, the up-front costs of registration and certification and the present value of operations and maintenance cost savings over the life of the asset. For the purposes of this analysis, operations and maintenance cost savings shall be comprised of projected costs the county will incur over the life of the asset. The costs included in this analysis shall be quantifiable, documented and verifiable by

third-party review upon project completion and thereafter.

2. At thirty percent of the design phase and project completion, the project team shall submit to the green building team a completed LEED checklist or Sustainable Infrastructure Scorecard that documents which LEED or scorecard points that the project expects to achieve.

3. For projects achieving a LEED rating, the project team shall ensure that energy efficiency is given the highest priority. Project teams shall submit a completed LEED checklist, which documents which LEED points the project team expects to achieve, to the green building team, initially at the schematic or thirty percent design phase of the project and then at the completion of the project.

4. If it is determined that costs are too high to achieve a LEED Gold rating, or that the project is unable to achieve that rating for technical reasons, projects shall achieve the highest rating possible with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset as compared to a project that is not seeking a green building or sustainable development rating system certification. There may be extenuating circumstances for some LEED-eligible projects that make it cost prohibitive to achieve any level of LEED certification. These projects must submit a written summary to the director of the department managing the project for approval, documenting the reasons why the project is not getting a LEED certification.

((F-)) G. A project may request use of an alternative green building or sustainability rating system in lieu of LEED or the Sustainable Infrastructure Scorecard. Alternative green building and sustainable rating systems include: the Evergreen Sustainable Development Standard, administered by the Washington State Department of Commerce; the Built Green Four-Star administered by the Master Builders Association of King and Snohomish Counties; Sustainable Sites Initiative Program, developed by the American Society of Landscape Architects and Lady Bird Johnson Wildflower Center and United States Botanical Garden; Salmon Safe founded by the Stewardship Partners; or the Living Building Challenge administered by the International Living Future Institute. A project manager shall make a request to use an alternative green building rating

system to the department director responsible for that project and to the green building team if a project elects not to use the LEED Rating System. The project's department director in consultation with the Green Building Team, shall make the final determination. All projects using an alternative green building or sustainable development rating system shall plan for and achieve the highest certification level that can be achieved with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset, as compared to a project that is not seeking certification.

H. For those projects (~~((which))~~) that only involve making either renewable energy improvements or energy efficiency improvements, or both, at or before the project has reached thirty percent of the design phase, the project team shall conduct an analysis that determines the incremental costs of making such improvements. The costs to be included in this analysis shall include the up-front incremental construction costs and the present value of the operations and maintenance cost savings over the life of the asset. For the purposes of this analysis, operations and maintenance cost savings shall be comprised of projected costs the county will incur over the life of the asset. The costs included in this analysis shall be quantifiable, documented and verifiable by third-party review upon project completion and thereafter.

~~((G.))~~ I. To help achieve a standard level of green building operations in existing buildings, the green building team, in coordination with divisions that have capital project or building management staff and the GreenTools technical support team, shall develop a set of both mandatory and recommended green building operational guidelines for divisions to incorporate into their facility operations procedures. The guidelines shall provide direction on the use of green practices in minor remodels and renovations, water and energy conservation, waste reduction and recycling expectations, green cleaning standards and retrocommissioning to improve a facility's operating performance.

~~((H.))~~ J. No later than January 31 of each year, all divisions responsible for capital improvement projects or building management shall submit a report to the department of natural resources and parks,

detailing the green building and sustainable development accomplishments for the previous year. Information to be submitted shall include, but not be limited to:

1. The total number of capital projects a division is responsible for, and the number of LEED projects and other sustainable development projects, such as historic restoration and adaptive reuse, and their status;
2. The additional costs associated with achieving LEED certification;
3. The total number of non-LEED projects that have completed a sustainable development scorecard;
4. The green strategies employed;
5. The operations and maintenance costs for all completed projects incorporating green building principles and practices and projects incorporating renewable energy or energy efficiency components, as well as the operations and maintenance costs that were projected before construction;
6. The reductions in greenhouse gas emissions;
7. The construction waste recycled; renewable resources used;
8. The green materials used; and
9. The fiscal performance of all projects incorporating green building principles and practices including an accounting of all project costs and benefits that can be quantified, documented and verified.

~~((F))~~ K. The executive shall report on the progress of implementing K.C.C. 18.17.020 in accordance with K.C.C. 18.50.010.

~~((F))~~ L. The green building team shall coordinate and share information about the use of sustainable development practices countywide and, with assistance from the GreenTools program, develop tools and training for project managers to implement this legislation. Its role includes:

1. Helping to assess regionally appropriate green building and sustainable development practices;
2. Developing regionally appropriate building and infrastructure design standards and guidelines;
3. Developing tools and procedures for assessing life-cycle fiscal, environmental and functional costs and benefits;

4. Convening and facilitating sustainable development planning and charrette workshops;
5. Evaluating performance of projects and facilities, including conducting post occupancy surveys, energy and water use audits and evaluating benefits realized; and
6. Tracking and reporting progress on implementation of green building and sustainable development practices.

~~((K-))~~ M. Each division with capital project ~~((or)),~~ operations and maintenance, building management or permitting staff shall designate one or more green building team member or members. The team member is expected to regularly attend meetings and actively participate in disseminating sustainable development practices information back to the respective division. Green building team members should also receive either specialized training or additional training, or both, in green building design and should be encouraged to achieve the LEED Accredited Professional designation, as appropriate.

~~((L-))~~ N. County capital improvement project managers that are currently managing or will manage projects that fit the criteria in subsections D. and E. of this section are responsible for attending appropriate LEED and sustainable development training and annual refresher courses. Trainings shall be coordinated by the green building team.

~~((M-))~~ O. The GreenTools program shall provide technical support for the county green building team and to cities and the general public in the county as appropriate, including, but not limited to, training on LEED and other green building and sustainable development technologies, research, project review, assisting with budget analysis and convening groups to develop strategies and policies relating to green buildings and sustainable infrastructures.

~~((N-))~~ P. The green building team shall work with the historic preservation program to develop a pilot format of the Sustainable Infrastructure Scorecard applicable to renovations of facilities listed under the county's historic preservation program and funded through King County. The preservation, restoration and adaptive reuse of existing buildings is an important green building strategy because historic preservation is, in

itself, sustainable development. As part of the county green building strategy, the county shall preserve and restore the historic landmarks and properties eligible for landmark designation that are owned by the county, except in cases where a certificate of appropriateness is granted by the King County landmarks commission. Projects involving designated landmarks or properties that are eligible for landmark designation shall seek to maximize green building strategies such as natural daylighting and passive ventilation. However, the King County landmarks commission or other applicable regulatory body may waive requirements of this section upon issuing findings that strict compliance with this chapter would adversely affect the historic character of the resource in question, or that there are no feasible alternatives for preservation.

Q. The green building and sustainable development practices in this policy are intended to ensure high performance in energy, water and waste reduction. In addition to the requirements of this chapter, the following minimum requirements shall be applied to all projects when applicable:

1. Meet energy and climate goals and performance requirements as directed in the King County Strategic Climate Action Plan, developed under K.C.C. chapter 18.25. The project team shall ensure that energy efficiency is given the highest priority;

2. Meet King County Surface Water Design Manual Standards and requirements, regardless of jurisdiction location. If a project is located in a jurisdiction where the surface water design manual standards and requirements are different than King County's, the project shall implement the more stringent requirement; and

3. By 2025, achieve an eighty-five percent diversion rate for construction and demolition materials with an eighty percent diversion rate achieved by 2016.

R. The King County Strategic Climate Action Plan includes goals and measures related to green building. To encourage green building practices on a community wide level, King County shall implement practices that will increase the awareness, certification, and innovation in green building and sustainable development. Efforts shall include, but not be limited to, the following:

1. The department of permitting and environmental review shall develop a handbook that includes, but is not limited to: a comprehensive inventory of green building techniques and materials for relevant county customer base; a description of permitting application materials related to various green building techniques; and instructional details that inform county staff on how to review permitting applications that involve new or rarely-used green building techniques and materials;

2. The department of public health, water and land resources division of the department of natural resources and parks, and department of permitting and environmental review staff who review and approve permits related to development will receive training in green building and high performance rating systems, such as Built Green Emerald Star and the Living Building Challenge. An interagency review committee will be formed with members from permitting agencies, including the department of public health, water and land resources division of the department of natural resources and parks, department of permitting and environmental review and the Green Building Team, to facilitate review of projects that involve multiple green building systems and to facilitate approval of buildings using high performance rating systems or features;

3. The department of permitting and environmental review shall participate in the existing regional code collaboration to unify building department codes throughout King County that promote green building. The development of unified green codes encourages economic growth and environmental sustainability, and is an integral tenet of the King County Strategic Plan. Applicable code revisions will be adopted, with initial emphasis on minimum recycling requirements for construction and demolition projects; and

4. The department of public health, water and land resources division of the department of natural resources and parks and department of permitting and environmental review shall implement a Living Building Challenge demonstration ordinance in partnership with members of the regional code collaboration to promote and encourage carbon neutral buildings and development. These departments will utilize the International Living Future Institute's guidelines to develop best management practices associated with this certification.

SECTION 4. Ordinance 16147, Section 4, and K.C.C. 18.17.030 are each hereby amended to read as

follows:

A. The department of natural resources and parks shall continue, as permitted by available funding, the green building grant program established to provide incentives to the private sector, nonprofit organizations and suburban cities to adopt green building and sustainable development practices.

B. Grant funding shall be ~~((supported by the solid waste division, the water and land resources division and the wastewater treatment division))~~ identified by the green building team by researching possible funding sources for grant opportunities. Other county department and divisions may also participate in the grant program. ~~((Grant funding shall be identified annually, consistent with approved funding of each division's annual budget.))~~

C. Grant funds shall be managed by the ~~((GreenTools program))~~ green building team in cooperation with ~~((the wastewater treatment and water and land resources))~~ other county divisions.

D. Green building grant funding may go to residential or commercial projects that meet a discrete set of eligibility requirements, are in the service area of the division providing the grant funding and are selected in a competitive award process. Grant projects must provide educational opportunities to the public to increase the awareness and benefits of green building and sustainable development in King County.

SECTION 5. Ordinance 16147, Section 4, Ordinance 17166, Section 7, and Ordinance 17420, Section 74, are each hereby repealed.

SECTION 6. Section 7 of this ordinance takes effect August 1, 2014.

SECTION 7. Ordinance 16147, Section 3, as amended, and K.C.C. 18.17.020 are each hereby amended to read as follows:

A. The intent of this policy is to ensure that the planning, design, construction, remodeling, renovation, maintenance and operation of any King County-owned or financed capital project is consistent with the latest green building and sustainable development practices.

B. This policy applies to all King County-owned or lease-to-own capital projects, excluding projects

that have already completed thirty percent of the design phase by ~~((the effective date of this section))~~ August 1, 2014. This policy also applies to housing projects partly or totally financed by King County that are required by law to follow statewide green building standards in that it requires such projects to report on the statewide green building standards.

C. All capital projects to which this chapter applies shall utilize relevant green building and sustainable development criteria to implement sustainable development practices in planning, design, construction and operation as set forth in this chapter.

D. All LEED-eligible new construction ~~((and major remodels and renovations))~~ shall be registered through the United States Green Building Council and should plan for and achieve a LEED ~~((Gold))~~ Platinum certification, as long as a ~~((Gold))~~ Platinum certification can be achieved with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset, as compared to a project that is not seeking a green building or sustainable development rating system certification. The incremental cost impact shall be determined as described in subsection ~~((F.))~~ G. of this section.

E. All LEED-eligible major remodels and renovations shall be registered through the United States Green Building Council and should plan for and achieve a LEED Gold certification, as long as a Gold certification can be achieved with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset, as compared to a project that is not seeking a green building or sustainable development rating system certification. The incremental cost impact shall be determined as described in subsection G. of this section.

F. All capital projects, where the scope of the project or type of structure limits the ability to achieve LEED certification, shall incorporate cost-effective green building and sustainable development practices based on relevant LEED criteria and other applicable sustainable development goals and objectives. These projects shall use the King County or division-specific Sustainable Infrastructure Scorecard, along with guidelines for

using the scorecard. Each Sustainable Infrastructure Scorecard project shall plan for and achieve a Platinum rating as long as a Platinum rating can be achieved with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset as compared to a project not achieving a green building or sustainable development rating. The incremental cost impact shall be determined as described in subsection ~~((F.))~~ G. of this section. If a Platinum rating cannot be achieved with no incremental cost impact to the general fund and an incremental cost impact of no more than two percent to other funds over the life of the asset as compared to a project not achieving a green building or sustainable development rating, a Sustainable Infrastructure Scorecard project shall plan for and achieve a Gold rating. If a Gold rating cannot be achieved with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset, Sustainable Infrastructure Scorecard projects shall plan for and achieve a silver rating where practicable. Silver is the lowest allowable rating for Sustainable Infrastructure Scorecard projects. For small, related capital projects that are implemented as part of a program, a project scorecard and reporting requirements may be done for the program rather than for each individual small project. For reporting purposes, county divisions may apply a single Sustainable Infrastructure Scorecard for a bundle of small capital projects in the most efficient manner as determined by the county division director to reflect the division's line of business.

~~((F.))~~ G.1. For each project subject to subsections D. ~~((E.))~~, E. and F. of this section, at or before the project has reached thirty percent of the design phase, the project team shall conduct an analysis that determines the incremental costs for achieving the rating required in subsection D., E. or F. of this section as compared to a project that is not seeking a green building or sustainable development rating system certification. The analysis shall include the up-front incremental construction costs, the up-front costs of registration and certification and the present value of operations and maintenance cost savings over the life of the asset. For the purposes of this analysis, operations and maintenance cost savings shall be comprised of projected costs the county will incur

over the life of the asset. The costs included in this analysis shall be quantifiable, documented and verifiable by third-party review upon project completion and thereafter.

2. At thirty percent of the design phase and project completion, the project team shall also provide a summary discussion of the LEED checklist or Sustainable Infrastructure Scorecard points that the project expects to achieve.

3. For projects achieving a LEED rating, the project team shall ensure that energy efficiency is given the highest priority. Project teams shall submit a completed LEED checklist, which documents which LEED points the project team expects to achieve, to the green building team, initially at the schematic or thirty percent design phase of the project and then at the completion of the project.

4. If it is determined that costs are too high to achieve the LEED ((Gold)) rating required in subsection D. or E. of this section, or that the project is unable to achieve that rating for technical reasons, projects shall achieve the highest rating possible with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset as compared to a project not achieving a LEED rating. There may be extenuating circumstances for some LEED-eligible projects that make it cost prohibitive to achieve any level of LEED certification. These projects must submit a written summary to the director of the department managing the project for approval, documenting the reasons why the project is not getting a LEED certification.

H. All housing projects financed by King County and owned and managed by either a housing authority or nongovernmental agency under contract with King County that are required by RCW 39.35D.080 or other applicable authority to use a statewide green building standard for affordable housing, shall submit a copy of the green building standard checklist to the green building team. The department of community and human services shall submit the statewide green building standard checklist to the green building team at project completion.

I. Transit oriented development initiated by Metro transit shall follow the same green building

standards and requirements as other King County capital projects. If required by RCW 39.35D.080 and other applicable authority, transit-oriented affordable housing projects in which the affordable housing is financed in whole or in part by King County shall follow the statewide green building standards.

((G.)) J. A project may request use of an alternative green building or sustainability rating system in lieu of LEED or the Sustainable Infrastructure Scorecard. Alternative green building and sustainable rating systems include: the Evergreen Sustainable Development Standard, administered by the Washington State Department of Commerce; the Built Green Four-Star administered by the Master Builders Association of King and Snohomish Counties; Sustainable Sites Initiative Program, developed by the American Society of Landscape Architects and Lady Bird Johnson Wildflower Center and United States Botanical Garden; Salmon Safe founded by the Stewardship Partners; or the Living Building Challenge administered by the International Living Future Institute. A project manager shall make a request to use an alternative green building rating system to the department director responsible for that project and to the green building team if a project elects not to use the LEED Rating System. The project's department director in consultation with the Green Building Team, shall make the final determination. All projects using an alternative green building or sustainable development rating system shall plan for and achieve the highest certification level that can be achieved with no incremental cost impact to the general fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset, as compared to a project that is not seeking certification.

((H.)) K. For those projects that only involve making either renewable energy improvements or energy efficiency improvements, or both, at or before the project has reached thirty percent of the design phase, the project team shall conduct an analysis that determines the incremental costs of making such improvements. The costs to be included in this analysis shall include the up-front incremental construction costs and the present value of the operations and maintenance cost savings over the life of the asset. For the purposes of this analysis, operations and maintenance cost savings shall be comprised of projected costs the county will incur

over the life of the asset. The costs included in this analysis shall be quantifiable, documented and verifiable by third-party review upon project completion and thereafter.

~~((F))~~ L. To help achieve a standard level of green building operations in existing buildings, the green building team, in coordination with divisions that have capital project or building management staff and the GreenTools technical support team, shall develop a set of both mandatory and recommended green building operational guidelines for divisions to incorporate into their facility operations procedures. The guidelines shall provide direction on the use of green practices in minor remodels and renovations, water and energy conservation, waste reduction and recycling expectations, green cleaning standards and retrocommissioning to improve a facility's operating performance.

~~((J. No later than January 31 of each year,))~~ M.1. The executive shall report on the progress of implementing this section in accordance with K.C.C. 18.50.010. Reporting requirements and criteria for green building metrics shall be consistent with the annual environmental sustainability report on King County's climate, energy, green building and environmentally preferred purchasing programs and the Strategic Climate Action Plan. Required green building reporting criteria shall be included in the county's project information center database, managed by the office of performance, strategy and budget. The project information center database shall be compatible and function with all county division capital project management systems to streamline and avoid duplicative reporting efforts. The green building team's program manager shall have access to data in the project information center database. ~~((a))~~ All divisions responsible for capital improvement projects or ((building)) facility management shall ((submit a report to the department of natural resources and parks,)) provide information detailing the green building and sustainable development accomplishments for the previous year. The information shall be provided to the green building team, either in hard copy or electronically. Information to be submitted shall include, but not be limited to:

~~((1-))~~ a. ~~((F))~~ the total number of capital projects a division is responsible for((, and));

b. the total number of LEED projects;

- c. the total number of Sustainable Infrastructure Scorecard projects;
- d. the total number of alternative green building or sustainable development rating system projects,
and other sustainable development projects, such as historic restoration and adaptive reuse(~~(, and their status)~~);
- ~~((2.))~~ e. ~~((F))~~the additional costs associated with achieving LEED certification;
- ~~((3.))~~ f. ~~((F))~~the total number of ((non-LEED projects that have completed a sustainable development scorecard)) projects using an integrative design process;
- ~~((4.))~~ g. ~~((F))~~the green building and sustainable development strategies employed;
- ~~((5.))~~ h. ~~((F))~~the operations and maintenance costs for all completed projects incorporating green building principles and practices and projects incorporating renewable energy or energy efficiency components, as well as the operations and maintenance costs that were projected before construction;
- ~~6. The reductions in greenhouse gas emissions;~~
- ~~7. The construction waste recycled; renewable resources used;~~
- ~~8. The green materials used; and~~
- 9.)) i. ~~((F))~~the fiscal performance of all projects incorporating green building principles and practices including an accounting of all project costs and benefits that can be quantified, documented and verified;
- j. projected and actual energy savings measured;
- k. projected and actual water savings;
- l. a construction and demolition plan and a construction and demolition report, both of which include the diversion percentage rate and tonnage;
- m. actual environmentally preferable products used;
- n. projected and actual greenhouse gas emissions and saving based on the reporting that is required in the project information center database; at minimum, greenhouse gas calculations shall include the greenhouse gas emissions associated with energy and water usage, transportation impacts and construction and demolition diversion. When possible the calculation shall include the greenhouse gas savings associated with

use of green strategies and environmentally preferable products;

o. projected and actual transportation impacts, including the transportation-related greenhouse gas emissions associated with the project; and

p. other reporting criteria that may be identified in the future.

2. Housing projects financed by King County and owned by either a housing authority or nongovernmental agency under contract with King County are exempted from the annual reporting requirements under subsection M.1. of this section.

3. The green building team, along with other relevant sustainability programs, and the office of performance, strategy and budget shall develop and determine consistent understandable and relevant baselines and measurement units that are applicable to diverse lines of business. Reporting criteria and performance measures shall be consistent with other related environmental requirements.

4. The process for reporting for projects grouped by program shall be determined by each division with the course of action that best captures green building performance for small projects grouped by program. Divisions may consider joint review of its small projects with the green building team program manager for assistance with scorecard and annual reporting compliance.

N. Green building requirements should be included by the procurement services section of the department of executive services, where possible and appropriate, in capital design and construction contracts, bid documents and technical specifications. The project manager responsible for the capital project shall collaborate with procurement services section staff to determine where green building requirements are appropriate. As applicable, requests for proposals and qualifications should include a list or description of LEED experience. Procurement documents that relate to construction or capital projects shall cite this chapter. The green building team shall develop minimum standards for building projects that address the monitoring of energy and water using systems that help meet energy and climate goals, and provide real time interfaces to ensure ongoing efficient operations.

~~((K. The executive shall report on the progress of implementing K.C.C. 18.17.020 in accordance with K.C.C. 18.50.010.~~

~~L.))~~ O. The green building team shall coordinate and share information about the use of sustainable development practices countywide and, with assistance from the GreenTools program, develop tools and training for project managers to implement this legislation. Its role includes:

1. Helping to assess regionally appropriate green building and sustainable development practices;
2. Developing regionally appropriate building and infrastructure design standards and guidelines;
3. Developing tools and procedures for assessing life-cycle fiscal, environmental and functional costs and benefits;
4. Convening and facilitating sustainable development planning and charrette workshops;
5. Evaluating performance of projects and facilities, including conducting post occupancy surveys, energy and water use audits and evaluating benefits realized; and
6. Tracking and reporting progress on implementation of green building and sustainable development practices.

~~((M.))~~ P. Each division with capital project, operations and maintenance, building management ~~((or))~~, permitting or housing staff shall designate one or more green building team member or members. The team member is expected to regularly attend meetings and actively participate in disseminating sustainable development practices information back to the respective division. Green building team members should also receive either specialized training or additional training, or both, in green building design and should be encouraged to achieve the LEED Accredited Professional designation, as appropriate.

~~((N.))~~ Q. County capital improvement project managers that are currently managing or will manage projects that fit the criteria in subsections D. and E. of this section are responsible for attending appropriate LEED and sustainable development training and annual refresher courses. Trainings shall be coordinated by the green building team.

~~((Q-))~~ R. The GreenTools program shall provide technical support for the county green building team and to cities and the general public in the county as appropriate, including, but not limited to, training on LEED and other green building and sustainable development technologies, research, project review, assisting with budget analysis and convening groups to develop strategies and policies relating to green buildings and sustainable infrastructures.

~~((P-))~~ S. The green building team shall work with the historic preservation program to develop a pilot format of the Sustainable Infrastructure Scorecard applicable to renovations of facilities listed under the county's historic preservation program and funded through King County. The preservation, restoration and adaptive reuse of existing buildings is an important green building strategy because historic preservation is, in itself, sustainable development. As part of the county green building strategy, the county shall preserve and restore the historic landmarks and properties eligible for landmark designation that are owned by the county, except in cases where a certificate of appropriateness is granted by the King County landmarks commission. Projects involving designated landmarks or properties that are eligible for landmark designation shall seek to maximize green building strategies such as natural daylighting and passive ventilation. However, the King County landmarks commission or other applicable regulatory body may waive requirements of this section upon issuing findings that strict compliance with this chapter would adversely affect the historic character of the resource in question, or that there are no feasible alternatives for preservation.

~~((Q-))~~ T. The green building and sustainable development practices in this policy are intended to ensure high performance in energy, water and waste reduction. In addition to the requirements of this chapter, the following minimum requirements shall be applied to all projects when applicable:

1. Meet energy and climate goals and performance requirements as directed in the King County Strategic Climate Action Plan, developed under K.C.C. chapter 18.25. The project team shall ensure that energy efficiency is given the highest priority;

2. Meet King County Surface Water Design Manual Standards and requirements, regardless of

jurisdiction location. If a project is located in a jurisdiction where the surface water design manual standards and requirements are different than King County's, the project shall implement the more stringent requirement; and

3. By 2025, achieve an eighty-five percent diversion rate for construction and demolition materials with an eighty percent diversion rate achieved by 2016.

~~((R-))~~ U. The King County Strategic Climate Action Plan includes goals and measures related to green building. To encourage green building practices on a community wide level, King County shall implement practices that will increase the awareness, certification, and innovation in green building and sustainable development. Efforts shall include, but not be limited to, the following:

1. The department of permitting and environmental review shall develop a handbook that includes, but is not limited to: a comprehensive inventory of green building techniques and materials for relevant county customer base; a description of permitting application materials related to various green building techniques; and instructional details that inform county staff on how to review permitting applications that involve new or rarely-used green building techniques and materials;

2. The department of public health, water and land resources division of the department of natural resources and parks, and department of permitting and environmental review staff who review and approve permits related to development will receive training in green building and high performance rating systems, such as Built Green Emerald Star and the Living Building Challenge. An interagency review committee will be formed with members from permitting agencies, including the department of public health, water and land resources division of the department of natural resources and parks, department of permitting and environmental review and the Green Building Team, to facilitate review of projects that involve multiple green building systems and to facilitate approval of buildings using high performance rating systems or features;

3. The department of permitting and environmental review shall participate in the existing regional code collaboration to unify building department codes throughout King County that promote green building.

The development of unified green codes encourages economic growth and environmental sustainability, and is an integral tenet of the King County Strategic Plan. Applicable code revisions will be adopted, with initial emphasis on minimum recycling requirements for construction and demolition projects; and

4. The department of public health, water and land resources division of the department of natural resources and parks and department of permitting and environmental review shall implement a Living Building Challenge demonstration ordinance in partnership with members of the regional code collaboration to promote and encourage carbon neutral buildings and development. These departments will utilize the International Living Future Institute's guidelines to develop best management practices associated with this certification.