



King County Green Building Initiative

2003 Annual Report

TABLE OF CONTENTS

INTRODUCTION	2
2003 HIGHLIGHTS	2
GREEN BUILDING PROJECTS	3
Summary	3
Current Project Table	4
2003 Project Table	5
Department Accomplishments	
Executive Services, Facilities Management Division	6
Transportation, Transit Division	6
Natural Resources and Parks, Wastewater Treatment Division	7
Natural Resources and Parks, Solid Waste Division	8
Natural Resources and Parks, Water and Land Resources Division	8
Natural Resources and Parks, Parks Division	8
Natural Resources and Parks, Director's Office	9
Department of Development and Environmental Services	9
CHALLENGES	10
CONCLUSION	11
LEED™ Scorecard Example	12

Cover Photos:

- (1) King County International Airport Green Roof
- (2) Entrance to Kent Pullen Regional Communications and Emergency Coordination Center
- (3) Old Growth Timbers Salvaged from Atlantic/Central Base Deconstruction

This notice will be provided in
alternate formats upon request.

2003 King County Green Building Initiative Annual Report

Introduction

The Green Building Team is pleased to submit its second annual report to the Executive. This overview of the accomplishments and challenges encountered as King County continues to 'green' its design and construction practices, highlights important milestones and makes recommendations for green building standards in County capital projects.

The Green Building Initiative adopted as an Executive Order in November 2001:

- Encourages and promotes the use of green building practices in all buildings the County constructs, remodels, and renovates.
- Incorporates and supports the use of the LEED™ (Leadership in Energy and Environmental Design) green building rating system.
- Established a countywide Green Building Team to educate and guide Departments in green building practices.

The Green Building Initiative underscores King County's commitment to minimize the environmental impacts of construction by encouraging practices that conserve resources, use recycled content materials, maximize energy efficiency, and otherwise address environmental and social considerations in county-wide projects. The initiative also promotes economic benefits such as the reduction of operating costs, enhanced asset value, optimal building performance and a healthier workplace for employees.



King County International Airport used environmental materials throughout, including easy-to-recycle carpet

2003 Highlights

- King County's **First LEED™ Building Completed** – The Kent Pullen Regional Communications & Emergency Coordination Center (Certified Rating pending.)
- Completion of King County Airport with green features
- Four projects registered for LEED™ certification:
 - Transit Power Distribution Headquarters
 - Atlantic/ Central Base Tire and Millwright Shop
 - Transit Communications and Control Center
 - 1st NE Transfer Station
- Eco-charrettes for Harborview and Marymoor Maintenance Facility projects
- Green Building Initiative Awards presented to Transit and Wastewater Treatment Divisions.
- Tours of Islandwood, Seattle Street Edge Alternative Project, King County Airport, Kent Pullen Emergency Operations Center.

2003 Green Building Initiative Accomplishments

Background

The Green Building Team continues to serve as a technical resource for all King County Departments and provides technical support to project teams including LEED™ training, budget analyses, and strategic and policy support relating to green building. The Team maintains and monitors County projects striving to incorporate LEED™ criteria. The Team consists of individuals representing the following departments:

- Natural Resources and Parks
- Transportation
- Executive Services
- Adult & Juvenile Detention
- Development and Environmental Services

Green Building Projects

Background

Departments are directed to apply LEED™ criteria in the pre-design and design phase of projects, and are encouraged to seek the highest LEED™ certification applicable to the project. The types of projects where LEED™ certification could apply include transfer stations, wastewater treatment facilities, office buildings, maintenance facilities and recreational facilities. Because the County frequently constructs project types where LEED™ certification is not a realistic goal, Departments are encouraged to use LEED™ as a guideline for incorporating green building practices.

Summary of 2003 Accomplishments

- The Kent Pullen Regional Communications and Emergency Coordination Center, is awaiting LEED™ certification after its completion in 2003, as is The King Street Center under a pilot program LEED™ for Existing Buildings.
- The Transit Division registered three projects and the Solid Waste Division registered one project with the US Green Building Council for LEED™ certification.
- In building projects where the number of available credits is limited, many projects have opted to apply a “LEED™ Equivalent” rating system. Although these projects are not eligible for official certification, this approach allows for integrating LEED™ principles into the project design to the greatest extent possible.

Current Projects

The table below provides updates on county projects that were included in the 2002 Annual Report. There are Completed projects listed, and five projects that are pursuing a LEED™ Rating. Construction project schedules can sometimes extend for several years, so this report will strive to report the status of all reported projects. Projects marked with an asterisk* opted to comply with the Initiative, even though they were under design in 2001, pre-dating the Initiative.

Project Name	Division	Current Phase	Description	Eco-Charrette Held	Achievable LEED Rating	Pursuing LEED
Regional Communication & Emergency Coordination Center	FMD	1 st Completed LEED Building	Commercial	YES	Certified +	Registered
King Street Center	SWD	Existing Building	Commercial	N/A	Silver	Registered
King County International Airport	FMD	Completed	Commercial/Industrial	NO	Equivalent Certified	Pursued LEED Strategies/ Not Registered
Atlantic/Central Base Tire and Millwright Shop	Transit	Design Development	Commercial & Industrial	YES	Certified	Registered
First NE Transfer Station	SWD	Design Development	Industrial	YES	Silver	Registered
Power Distribution Headquarters *	Transit	Design Development	Commercial & Industrial	YES	Certified	Registered
Harborview Medical Center	FMD	Design Development	Hospital	YES	Certified	Not Pursuing LEED
Redondo Heights Park & Ride Lot *	Transit	Construction	Parking Structure	NO	Equivalent Certified	Pursuing Equivalent Rating
Issaquah Highlands Park & Ride	Transit	Design Development	Parking Structure	NO	Equivalent Certified	Pursuing Equivalent Rating
Atlantic/Central Base Parking Garage	Transit	Construction	Parking Structure	YES	Equivalent Certified	Pursuing Equivalent Rating
Brightwater Treatment Plant	WTD	Design Development	Industrial	YES	Silver	Pursuing Silver/ Not Registered
Carnation Treatment Plant	WTD	Pre-Design	Industrial	YES	Certified +	TBD
Juanita Pump Station	WTD	Design Development	Industrial	YES	N/A	Not pursuing LEED

2003 County Projects With LEED™ Assessment

The table below outlines additional county projects that reported a LEED™ assessment in 2003. Projects marked with an asterisk pre-date the Initiative, but have opted to comply.

Project Name	Division	Current Phase	Description	Eco-Charrette Held	Achievable LEED Rating	Pursuing LEED
Atlantic/ Central Base North Yard	Transit	Design Development	Parking Structure	YES	Equivalent Certified	Pursuing Equivalent Rating
Atlantic/ Central Base Street Improvements	Transit	Construction	Street Improvement	YES	Equivalent Certified	Pursuing Equivalent Rating
Atlantic/ Central Base Expansion Demolition	Transit	Completed	Deconstruction	NO	Equivalent Gold	Equivalent Gold
Burien Transit Center	Transit	Pre-Design	Parking Structure	NO	Equivalent Certified	TBD
Communications and Control Center	Transit	Design Development	Commercial	NO	Certified	Registered
Eastgate Park & Ride / Interim Lot*	Transit	Construction	Parking Structure	NO	Equivalent Certified	Pursuing Equivalent Rating
Metro North Facilities	Transit	Pre-Design	Commercial & Industrial	NO	Certified +	TBD
Pacific Pump Station	WTD	Design Development	Industrial	NO	Not Certifiable	Not Pursuing LEED
Vashon Island Treatment Plant Upgrade	WTD	Design Development	Industrial	NO	Not Certifiable	Not Pursuing LEED
Marymoor Maintenance Facility	Parks	Design Development	Commercial/Industrial	YES	Silver	Pursuing Certification/Not Registered
Bow Lake Transfer Station	SWD	Design Development	Industrial	Scheduled For 2004	Silver	Pursuing Silver /Not Registered

Department Accomplishments

Executive Services, Facilities Management Division (FMD)



The RCECC boasts efficient mechanical and lighting systems that use 25% less energy than WA State Energy Code.

Facilities Management Division's accomplishments include:

- Completed construction of the Kent Pullen Regional Communications and Emergency Coordination Center (RCECC), **King County's first LEED™ registered project**. Sustainable design and construction strategies included on-site stormwater management, recycled-content and low-emitting materials selection, day-lighting and recycling of construction debris. Featured tour in this year's AIA 'What Makes It Green' conference. Case study available at:

<http://dnr.metrokc.gov/wtd/library/green/casestudies.htm>

- Completion of the King County International Airport Terminal Building reconstruction, including green features such as an 8,000 sq. ft. green roof reducing storm water runoff with a planting of rye grass - the County's largest green roof to date. Other sustainable strategies included addition of alternative fueling stations in the parking lot, incorporation of water conserving plumbing fixtures, reuse of the original structural shell, construction debris recycling, energy efficient lighting, low VOC building materials and day lighting in occupied spaces. Although not registered for LEED™, this project may be eligible for LEED™ certification.

Transportation, Transit Division

The seven projects listed in the 2003 chart above demonstrate that the King County Transit Division has embraced the Green Building Initiative and is incorporating LEED™ principles on a wide selection of building projects, even where the project predates the Initiative and is not required to comply and where certification is not possible due to the limited scope of the project. In addition to the above LEED™ assessed projects, the Transit Division has shown significant commitment to the Initiative by:



The refurbished KC Airport now includes a number of sustainable design elements: an eco-roof system, recycled building finishes, energy-efficient lighting, waterless urinals, low-flow toilets, operable windows and reused building materials.

- Maintaining exemplary construction waste management practices throughout the division, especially at Atlantic/ Central Base project sites.
<http://dnr.metrokc.gov/wtd/library/green/casestudies.htm>
- Creation of specifications and strategies for LEED™ credits that could be used to create a new standard for building projects throughout the division or county. For example, Power Distribution Headquarters accomplished 57.6% reduction in heat island effect through specifications requiring light colored concrete paving.

- Ensuring sustainable design expertise on project teams, through LEED™ certification of project managers or hiring green building specialists.
- Received Green Building Initiative Award for Atlantic/ Central Base Deconstruction project.
<http://dnr.metrokc.gov/wtd/library/green/casestudies.htm>

The complete Transit Division Green Building report for 2003 is available online at:
<ftp://dnr.metrokc.gov/dnr/library/2004/kcr1566.pdf>

Natural Resources and Parks, Wastewater Treatment Division (WTD)

The Wastewater Treatment Division continues to educate project managers and support green building in their Division. Their achievements include:

- The WTD Green Team was recognized by Executive Sims and DNRP Director Pam Bissonnette for “outstanding work accomplished in support of the KC Green Building Initiative.”
- Two half-day Green Building/LEED™ training sessions were held for major capital and asset management program managers.
- Project management resources were developed and included revised guide specifications, a green building on-call consultant contract, an updated FileMaker Pro database to include green strategies in project information, and updates to the Project Manager’s resource website.
- Provided grant funding to Seattle Tilth for a green roof and the Cascade Neighborhood Council for construction of a learning center teaching concepts of green design. Additional WTD money contributed to construction of the Carkeek Park Environmental Learning Center.
- Provided for replacement of plumbing fixtures at County facilities with water conserving fixtures and conservation-related signage as part of the Wastewater Conservation Program.



Maureen Welch, DNRP Deputy Director, recognizes project manager Mike Stanaszek at 2003 award ceremony.

In addition to the Wastewater Treatment Division building projects that have performed LEED™ assessment listed in the tables above, other projects that have incorporated green building strategies are listed below:

- The WTD Inflow and Infiltration Program uses less invasive trenchless technologies for replacing sewer system components. In 2003, 91,000 lineal feet of sewer line were rehabilitated, rather than replaced.
- The Fuel Cell Demonstration Project continues to explore the feasibility of producing electricity from wastewater treatment gas, and the South Treatment Plant cogeneration project will utilize digester gas to provide its own electricity.
- Use of recycled, and/or low VOC finish materials in the environmental laboratory expansion, East Division Corrosion repairs, repairs for Harbor and Lander Regulation Stations.

Natural Resources and Parks, Solid Waste Division (SWD)

The Solid Waste Division facilitated Green Team activities throughout 2003, including:

- Green Roof Feasibility Review
http://dnr.metrokc.gov/dnr/library/2004/KCGreenRoofStudy_Final.pdf
- Tours of Islandwood Environmental Learning Center, Seattle's Street Edge Alternative Project, King County Airport and the King County Regional Communications and Emergency Coordination Center.
- Preparation of the 2003 Green Team Annual Report
- LEED™ Supplement to King County - Online Tool
<http://dnr.metrokc.gov/swd/leed/default.asp>
This web-based tool, specific to King County, helps County capital project teams develop green buildings within the context of current King County building codes. The web site received over 14,000 hits in the weeks immediately after launch in 2002.
- DDES Training on Green Building
Solid Waste Division staff collaborated with DDES staff to create a series of green building trainings to take place in early 2004 for permitting staff. Topics were to include BUILT GREEN™, Soil Best Management Practices for Stormwater Management, Erosion Control & Landscape Success, among others.
- Hosted professionally facilitated "eco-charrettes"
Eco-charrettes are project-specific sessions that bring together all members of a project team to brainstorm on green building techniques. Participants may include elected officials, project managers, budget analysts, planners, designers, architects and engineers. The Green Building Team planned and hosted eco-charrettes in 2003 for:
 - Harborview Hospital Expansion
 - Marymoor Maintenance Facility

In addition, Solid Waste Division projects that incorporate green building strategies include:

- Maintained impressive construction waste recycling rates on Algona and Renton Transfer Station Roof Replacement projects. Renton achieved an 86% recycling rate by recycling 234 tons of material. Algona achieved an approximately 80% recycling rate.
- The Gas-To-Energy project for converting methane gas generated at Cedar Hills landfill to a usable energy source continues, with plans for construction in 2004.
- Continued participation in the EPA Waste Wise Program and the EPA's Green Building Challenge reporting King County's accomplishments on green building.

Natural Resources and Parks, Water and Land Resources Division (WLRD)

- WLRD staff member Steve Foley received a 2003 Green Building Initiative Award from Executive Ron Sims and DNRP Director Pam Bissonette for his work on the LID/BUILT GREEN Demonstration Project Ordinance.

Natural Resources and Parks, Parks Division

In 2003 the Parks Division entered the green building arena by performing an eco-charrette for a new maintenance facility. Although Parks has few capital projects, they have endeavored to consider environmental impacts in many of their building and facility maintenance decisions, from practicing plant salvage and low water irrigation practices to participation in comprehensive drainage maintenance and integrated pest management programs. 2003 Parks Division green building accomplishments include:

- Marymoor Maintenance Facility eco-charrette, resulting in a goal of LEED™ Certified or Silver.

- Retrofitting facility toilets and showers with low water use fixtures.
- Installation of computerized lighting systems for ballfields, reducing hours of unnecessary lighting.
- Using recycled materials in picnic tables, curb stops, speed bumps, and garbage cans. The large capacity, recycled plastic garbage cans reduce hauling trips and won an award for NAPCOR Grant Projects with Solid Waste.
- Installed three 50-gallon rain barrels to collect roof water from buildings at Marymoor Park.
- Recycled storm damage brush and wood as mulch in landscapes.

Natural Resources and Parks, Director's Office

- **Planning collaboration for the Puget Sound Sustainable Development Center**
The Puget Sound Sustainable Development Center developed a detailed business plan that includes siting criteria. The plan can be viewed online at <http://dnr.metrokc.gov/dnr/library/2004/BusinessPlanSDCenter.pdf>

Department of Development and Environmental Services (DDES)

DDES achieved the following green building accomplishments in 2003:

- Enactment of the BUILT GREEN and Low Impact Development Demonstration Ordinance, authorizing three residential developments: The HOPE VI Greenbridge project, located in White Center, CamWest's Shamrock development east of Renton, and Vashon Household's Sunflower development on Vashon Island. A goal of this ordinance is to allow the flexibility to develop environmentally friendly alternatives and implement solutions that will provide an ecologically sustainable future for these communities and demonstrate possibilities for future developments.
- Obtained a State Growth Management grant to pay for a series of trainings for permitting staff on green building techniques, planned in partnership with SWD and held in early 2004.



Innovative Storm Water Management: Green Team Tours Seattle Street Edge Alternative Project

Challenges

Green building is increasingly a major component of County projects. With only six registered LEED™ projects, and two pending certification, King County trails other comparable jurisdictions like the City of Seattle (16 projects registered) and the City of Issaquah (1 certified project) in certified green buildings. Within the City of Portland there are 39 registered projects, a mix of public and private developments, the most in the nation. In comparison to other jurisdictions, King County has been slow to commit to green building for some of its most visible projects. This ambivalence has affected several projects and resulted in missed opportunities to incorporate green building into high profile county buildings.

Another significant problem is getting information on green building features in King County projects. It can be very difficult to get some project managers to report information in a timely manner. It is also difficult for project managers to share information across project teams, so that our institutional knowledge of green building can grow. This is a vital element in becoming more efficient at procuring green services from the consultant community with whom we work to design and build our facilities. Familiarity with the process makes it easier to implement sustainable practices in our capital projects. The more detailed and descriptive we are in our RFP and RFQ language that specifies green building, the easier it becomes to budget for and set realistic green building goals.

LEED™ and Industrial Building Types

It may be more difficult to achieve LEED™ certification for the industrial projects that King County builds versus an office building because there may not be as many credits available to earn. However, thanks to innovative thinking on the part of the project teams, green building is becoming more standard practice. The US Green Building Council currently has several industrial projects registered under the LEED™ system, including the King County projects mentioned in this report.

The achievements of the Transit Division in particular, are beginning to illustrate how all projects, regardless of scope, can benefit by using the LEED™ rating system as a guideline. The *LEED™ Supplement to King County* addresses this by illustrating how each LEED™ credit could apply to commercial, industrial and ground-based projects. LEED™ scorecards showing how LEED™ principles can be incorporated using an Equivalent Rating evaluation can be seen in Transit's 2003 report at <ftp://dnr.metrokc.gov/dnr/library/2004/kcr1566.pdf>.

Cost Issues

Integrating green building strategies early in the design process allows projects to take full advantage of green technologies at the lowest net costs. Sometimes, however, green building systems or materials require higher front-end budgets that may be offset by reduced operating or maintenance costs over the life of the building. Particularly during times of budget reductions, higher up-front costs and the perception that building green costs more continue to present an obstacle to choosing LEED™ strategies. There is need for more extensive budget analysis encompassing the life cycle of green building strategies and highlighting environmental as well as economic costs to assist with integrating sustainable design in county projects.

Building Institutional Memory

As the first round of King County LEED™ projects are completed, the collective experience and knowledge gained must be shared throughout the county to bring down the costs and learning curve of implementing green building. Many of the strategies from one project have the potential to become part of the common language of King County design teams, through specifications and standards.

Several green building strategies are nearing standard practice in county building projects, for example, construction waste recycling and selection of low VOC finishes for indoor air quality. However, many opportunities to further reduce the impacts of new construction are missed because other strategies such as green roofs and rainwater harvesting for reuse are deemed too extreme or risky. A major focus for 2004 will be addressing this reluctance to adopt less familiar green building techniques.

Green Building and Codes

Finally, many projects discover that existing building and land use codes do not support adoption of some green building strategies. In particular, Low Impact Development (LID) stormwater management strategies for minimizing impervious surfaces can get caught in the permitting process with concerns about emergency vehicle access and street frontage requirements. In some jurisdictions there may be conflicts between street tree requirements and LEED™ drought tolerant planting strategies. If green building is to become the standard practice for all county projects, adapting codes to allow for low impact developments while continuing to protect public health and safety is a major challenge that King County will continue to address.

Conclusion

Coming in 2004

The number of LEED™ registered projects will likely double in 2004. There has also been interest expressed by the Council to draft green building legislation that would apply to the County's capital projects. If green building on capital projects is adopted into code by the King County Council, policies and procedures on how to implement such legislation will need to be developed.

County project managers have made significant strides to identify environmental considerations for their projects and incorporate LEED™ methods and techniques. The preliminary projects seeking compliance with the Initiative will serve as valuable learning tools for future projects. Tracking budgets and environmental benefits of LEED™ projects will assist with upfront cost analysis and comparison of sustainable development technologies. In 2004, The Green Building Team will target new means of promoting information sharing among project teams throughout the county as it builds its resources base of green building knowledge.



LEED™ Scorecard

Carnation Wastewater Treatment Plant – October 10, 2002

5 5 3 Sustainable Sites Possible Points 14

easy	mod	diff			
Y			Prereq 1	Erosion & Sedimentation Control	
		1	Credit 1	Site Selection	1
			Credit 2	Urban Redevelopment	1
		1	Credit 3	Brownfield Redevelopment	1
	1		Credit 4.1	Alternative Transportation, Public Transportation Access	1
1			Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
1			Credit 4.3	Alternative Transportation, Alternative Fuel Refueling Stations	1
	1		Credit 4.4	Alternative Transportation, Parking Capacity	1
		1	Credit 5.1	Reduced Site Disturbance, Protect or Restore Open Space	1
		1	Credit 5.2	Reduced Site Disturbance, Development Footprint	1
1			Credit 6.1	Stormwater Management, Rate or Quantity	1
1			Credit 6.2	Stormwater Management, Treatment	1
	1		Credit 7.1	Landscape & Ext. Design to Reduce Heat Islands, Non-Roof Surfaces	1
		1	Credit 7.2	Landscape & Exterior Design to Reduce Heat Islands, Roof Surfaces	1
1			Credit 8	Light Pollution Reduction	1

5 Water Efficiency Possible Points 5

easy	mod	diff			
1			Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
1			Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
1			Credit 2	Innovative Wastewater Technologies	1
1			Credit 3.1	Water Use Reduction, 20% Reduction	1
1			Credit 3.2	Water Use Reduction, 30% Reduction	1

1 3 6 Energy & Atmosphere Possible Points 17

easy	mod	diff			
Y			Prereq 1	Fundamental Building Systems Commissioning	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	CFC Reduction in HVAC&R Equipment	
	2		Credit 1.1	Optimize Energy Performance, 20% New / 10% Existing	2
		1	Credit 1.2	Optimize Energy Performance, 30% New / 20% Existing	2
			Credit 1.3	Optimize Energy Performance, 40% New / 30% Existing	2
			Credit 1.4	Optimize Energy Performance, 50% New / 40% Existing	2
			Credit 1.5	Optimize Energy Performance, 60% New / 50% Existing	2
		1	Credit 2.1	Renewable Energy, 5%	1
		1	Credit 2.2	Renewable Energy, 10%	1
		1	Credit 2.3	Renewable Energy, 20%	1
	1		Credit 3	Additional Commissioning	1
1			Credit 4	Ozone Depletion	1
		1	Credit 5	Measurement & Verification	1
		1	Credit 6	Green Power	1

7 2 Materials & Resources Possible Points 13

easy	mod	diff			
Y			Prereq 1	Storage & Collection of Recyclables	
			Credit 1.1	Building Reuse, Maintain 75% of Existing Shell	1
			Credit 1.2	Building Reuse, Maintain 100% of Existing Shell	1
			Credit 1.3	Building Reuse, Maintain 100% Shell & 50% Non-Shell	1
1			Credit 2.1	Construction Waste Management, Divert 50%	1
1			Credit 2.2	Construction Waste Management, Divert 75%	1
1			Credit 3.1	Resource Reuse, Specify 5%	1
1			Credit 3.2	Resource Reuse, Specify 10%	1
1			Credit 4.1	Recycled Content, Specify 25%	1
1			Credit 4.2	Recycled Content, Specify 50%	1
			Credit 5.1	Local/Regional Materials, 20% Manufactured Locally	1
		1	Credit 5.2	Local/Regional Materials, of 20% Above, 50% Harvested Locally	1
			Credit 6	Rapidly Renewable Materials	1
		1	Credit 7	Certified Wood	1

8 7 Indoor Environmental Quality Possible Points 15

easy	mod	diff			
Y			Prereq 1	Minimum IAQ Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
		1	Credit 1	Carbon Dioxide (CO2) Monitoring	1
		1	Credit 2	Increase Ventilation Effectiveness	1
1			Credit 3.1	Construction IAQ Management Plan, During Construction	1
1			Credit 3.2	Construction IAQ Management Plan, Before Occupancy	1
		1	Credit 4.1	Low-Emitting Materials, Adhesives & Sealants	1
		1	Credit 4.2	Low-Emitting Materials, Paints	1
		1	Credit 4.3	Low-Emitting Materials, Carpet	1
		1	Credit 4.4	Low-Emitting Materials, Composite Wood	1
1			Credit 5	Indoor Chemical and Pollutant Source Control	1
		1	Credit 6.1	Controllability of Systems, Perimeter	1
		1	Credit 6.2	Controllability of Systems, Non-Perimeter	1
1			Credit 7.1	Thermal Comfort, Comply with ASHRAE 55-1992	1
1			Credit 7.2	Thermal Comfort, Permanent Monitoring System	1
1			Credit 8.1	Daylight & Views, Daylight 75% of Spaces	1
1			Credit 8.2	Daylight & Views, Views for 90% of Spaces	1

2 1 2 Innovation & Design Process Possible Points 5

easy	mod	diff			
		1	Credit 1.1	Innovation in Design: Specific Title	1
1			Credit 1.2	Innovation in Design: Specific Title	1
		1	Credit 1.3	Innovation in Design: Specific Title	1
		1	Credit 1.4	Innovation in Design: Specific Title	1
1			Credit 2	LEED™ Accredited Professional	1

28 18 11 Total Project Score Possible Points 69

Green Building Council

LEED Checklist

LEED™ Green Building Rating System

Certified: 26 to 32 points

Silver: 33 to 38 points

Gold: 39 to 51 points

Platinum: 52 or more points

EXAMPLE

LEED Scorecard for Carnation Wastewater Treatment Plant shows potential environmental strategies and techniques that may be used to garner a LEED™ Rating. This is the result of a large group brainstorming session or eco-charrette where environmental design ideas were generated by the project team and other stakeholders. A total of 28 points were identified, meaning a LEED ‘Certified’ rating may be possible for this project.