

Encouraging Green Development through the Permit Process



Tom Jensen
Green Building Team
City of Kirkland

Our approach

How did we get where we are today?

How does our program work?

Where do we go from here?

How did we get where we are today?

- Formed Inter-departmental Green Building Team task group
- Investigated various Green programs
- Sought expertise from other jurisdictions who already had programs
- Asked builders what they would like to see
- Developed an action plan for our own program
- Received “green” light from City Council

Green Building Team

- Planning and Community Development:
 - David Barnes (Project Lead)
 - Stacy Clauson
 - Scott Guter
- Public Works:
 - Stacey Rush
- Fire & Building:
 - Tom Jensen

Investigated various Green programs

- BuiltGreen program offered by the Master Builders Association of King and Snohomish Counties – Aaron Adelstein
- LEED for Homes program offered by the US Green Building Council – Marni Kahn
- ENERGY STAR Homes Northwest Certification – Alistair Jackson

Sought expertise from other jurisdictions with programs

- City of Issaquah – Resource Conservation Office –David Fujimoto
- King County – Solid Waste Division – Green Building – Cynthia Moffit, Patti Southard, Katie Spataro
- GreenTools for governments:
- www.metrokc.gov/dnrp/swd/greenbuilding/toolkit/pages/governments.html

Asked builders what they would like to see

- Held a builders forum to get input as to what actions we could take to encourage more builders to go greener:
- Technical advice and education
- Permit incentives in money and time
- Possible regulatory trade-offs

Developed an action plan for our own program

- Phase I: Pilot Program
- Phase II. Basic Program
- Phase III. Expanded Program

Received “green” light from City Council

- Agree with approach & phasing
(Phase I – Pilot program and permit priority.)
- Consider funding during Mid-Biennial Budget Review
- Evaluate program and consider additional phases during 2009-2010 budget.

Phase I: Pilot Program

- Elements

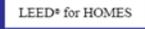
- Priority permit processing for new single family residences
- Technical advisor training/certification
- Limited public outreach to builders, developers and homeowners
- Green builders recognition program

Phase I: Pilot Program

- **Benefits**

- Establishes a program to further the sustainable development and carbon reduction goals of City
- Allows staff to become LEED certified professionals
- Recognizes and rewards green builders

How does our program work?

<p>The City of Kirkland is pleased to announce a new</p> <h2>Green Building Program</h2> <p>for New Single Family Building permit applications.</p>	
<p>Why Build Green?</p> <ul style="list-style-type: none">• Promote sustainability in Kirkland• Reduce energy and environmental impacts of construction• Meet the growing demand for healthier and more energy efficient homes• Receive an expedited permit review time	<p>Items needed to qualify for the Kirkland Green Building Program:</p> <ul style="list-style-type: none">• Completed new single family building permit application• Completed BuiltGreen® program checklist (4 star minimum rating) or LEED® for Homes program checklist (Silver rating or better)• A signed third party contract with an approved program verifier• A completed and signed City of Kirkland Green Building expedited review form
<p>About rating programs:</p> <p>Energy Star Homes www.northwestenergystar.com</p> <p>BuiltGreen® of King & Snohomish Counties www.Builtgreen.net</p> <p>LEED® for Homes www.usgbc.org</p> <p>About Kirkland Green Building program: www.ci.kirkland.wa.us/kirklandgreen</p>   	<p>For assistance:</p> <p>PLANNING DEPARTMENT David Barnes 425-587-3250 dbarnes@ci.kirkland.wa.us Stacy Clauson 425-587-3248 sclauson@ci.kirkland.wa.us Scott Guter 425-587-3247 sguter@ci.kirkland.wa.us</p> <p>BUILDING DEPARTMENT Tom Jensen 425-587-3611 tjensen@ci.kirkland.wa.us</p> <p>PUBLIC WORKS DEPARTMENT Stacey Rush 425-587-3854 srush@ci.kirkland.wa.us</p>

Priority plan review

- Achieve minimum 4 Star Built Green **or**
- Minimum Silver LEED for Homes **and**
- Energy Star Homes Northwest rating

- Receive expedited plan review for free
- Similar to Third Party Review process
- Monetary penalty for failure to certify

Application/authorization form



CITY OF KIRKLAND
 Building Department * 425-567-3600
 Planning Department * 425-567-3225

For Office Use Only
 Green Technical Advisor Initials _____
 Date _____
 Green form in inspection card envelope _____

Green Building Program Priority Review For New Single Family Residences

Project Name: _____ Building Permit # _____

Property Address: _____

Property Owner: _____

Mailing Address: _____

Telephone: _____ Fax: _____ E-mail: _____

In an effort to encourage green building, the City of Kirkland is offering Priority Review to new single family residence permit applications which meet the requirements of Energy Star Homes or equivalent and the minimum requirements for one of the following certification programs:

Built Green (version 2007-03-01 or 2007-04-01) 4-Star or 5-Star or
 LEED for Homes (version 3.1.1a or 3.0) Silver Gold or Platinum

To qualify for Priority Review, the following items are required in addition to the standard requirements at permit application intake:

- A completed Built Green or LEED for Homes checklist, and
- A copy of a signed contract with a third party verifier approved under the program. This contract at a minimum should include preliminary rating services, construction inspection services and a final inspection and certification with confirmation of Energy Star Homes or equivalent.

New Residences on existing lots

With Priority Review on existing legal lots, the initial permit review will be completed in 15 working days. Second review will be completed in 10 working days. Once approved by all departments, please allow 2-4 working days for City staff to process your permit for issuance. For any existing legal lots of record, you may submit building permits at any time.

New Residences on subdivided lots

Please note that under the standard City requirements, you will not be able to submit for new building permits on each of the lots within a subdivision until the subdivision has been approved and recorded with King County, and new Tax Identification (parcel) numbers have been assigned.

- Is this residence in an approved subdivision? Yes No
 If yes, permit number: SPL _____
- Has the subdivision been recorded with King County? Yes No
- Have the new parcel numbers been assigned? Yes No

New Residences on multi-family lots

Multiple residences on a single parcel (e.g. - in a multi-family zone) are not eligible to participate in this program except under all of the following circumstances:

- A land surface modification (LSM) permit has been approved for the site development. The approved LSM must have sufficient information for the Planning Department to review all general site plan issues for the entire development, including:
 1. Lot coverage
 2. Vehicular and pedestrian access:
 3. Building footprints
 4. Tree Plan and tree protection
 5. Parking
 6. Setbacks
 7. Recreational open space
 8. Required landscaping
- The first building permit has been reviewed.
- The project is either SEPA exempt or a DING has been issued.

Building permit applications which meet these standards will be reviewed in 25 working days. Second review will be completed in 10 working days. Once approved by all departments, please allow 2-4 working days for City staff to process your permit for issuance. To assist in determining whether your project is eligible, please answer the following questions:

Has an LSM permit received approval (A status) for site development? Yes No
 Permit number: LSM _____

Have any permits for new single family residences been through first review in this development? Yes No
 Permit number: BLD _____

Is the project either SEPA exempt or has a DING been issued? Yes No
 Permit number: SEP _____

Priority Review will not be allowed if there is a zoning permit for the project, or there is an unrecorded change to the property lines, or if the buildings do not comply with setbacks, etc. unless specifically authorized by the Planning Department: _____ (Planner) Signature required.

Incomplete or inaccurate information may result in the application not being eligible for Priority Review. Failure to achieve the required minimum certification level will result in a fee equal to 50% of the building permit fee charged to the applicant to offset any overtime and/or consultant costs to the City. In this event, I hereby agree to pay \$ _____ due prior to final inspection.

Authorized By (print Owner/Agent name): _____

Owner/Agent Signature: _____ Date: _____

Additional requirements

- A completed Built Green (4 Star) **or**
- LEED for Homes (Silver) checklist, **and**
- A copy of a signed contract with a third party verifier approved under the program

Third party verifier contract to include

- preliminary rating services
- construction inspection services and
- a final inspection and certification with
- confirmation of Energy Star Homes or equivalent

Built Green checklist



Single-Family New Construction
Self-Certification Checklist

Project Address 12513 NE 66th St., Kirkland

Company Name Country Construction

Check items you will be including in this project to qualify for a BUILT GREEN™ star rating. Version 2007

Number	Possible Points	CREDITS	Point Totals	Comments
TWO-STAR REQUIREMENTS (160 points minimum)				
	required	All 8 items	*	
	required	Program Orientation (one time only)	*	
	required	Section 1: Build to "Green" Codes/Regulations and Program Requirements	*	
	required	Earn 75 additional points from Sections 2 through 5, with at least 6 points from each Section	*	
	required	Attend a Built Green™ approved workshop within past 12 months prior to certification	*	
THREE-STAR REQUIREMENTS (180 points minimum)				
	required	Meet 2-Star requirements plus point minimum	*	
	required	Achieve 10% of minimum point requirements in each section	*	
FOUR-STAR REQUIREMENTS (260 points minimum)				
	required	Meet 3-Star requirements plus point minimum	*	
	required	3 rd party verification required (See reference)	*	
Site & Water	required	No zinc galvanized ridge caps, copper flashing or copper wires for moss prevention (2-36)	*	
Site & Water	required	Landscape with plants appropriate for site topography and soil types, emphasizing use of plants with low watering requirements [drought tolerant] (2-39)	*	
Site & Water	required	Use the most efficient aerator available for the faucets used (2-44 and 2-45)	*	
Energy	required	Energy Star Homes or equivalent required (See action item 3-3)	*	
IAQ	required	Use low toxic/low VOC paint on all major surfaces (except for PVA primer which is currently not available) (4-32)	*	
IAQ	required	Ventilate with box fans in windows blowing out during drywall sanding and new wet finish applications (4-9)	*	
Materials	required	Practice waste prevention and recycling and buy recycled products (5-1)	*	
	required	Choose one of the following:	*	
IAQ		Provide built in walk-off mat and shoe storage area (4-76)		
IAQ		Use plywood and composites of exterior grade or with no added urea formaldehyde for interior uses (4-25)	Yes	
IAQ		Use high efficiency pleated filter of MERV 12 or better, or HEPA (4-53a)	Yes	
IAQ		Install sealed combustion heating and hot water equipment (4-63)	Yes	
FIVE-STAR REQUIREMENTS (300 points minimum)				
	required	Meet 4-Star requirements plus point minimum	*	
Site & Water	required	Minimum of 25% of total points earned for Site & Water	*	
Site & Water	required	Amend disturbed soil with compost to a depth of 10 to 12 inches to restore soil environmental functions (2-10)	*	
Site & Water	required	Use pervious materials for at least one-third of total area for driveways, walkways, and patios. (See action item 2-21)	*	
Site & Water	required	Limit use of turf grass to 25% of landscaped area (2-37)	*	
Site & Water	required	Avoid soil compaction by limiting heavy equipment use to building footprint and construction entrance (2-4)	*	
Site & Water	required	Preserve existing native vegetation as landscaping (2-5)	*	
Site & Water	required	Retain 30% of trees on site (2-6)	*	
Energy	required	Minimum R-20 for overall wall insulation (3-4)	*	
Energy	required	Maximum average U-value for all windows of 0.30 ACH (3-10)	*	
Energy	required	Advanced framing with double top plates (3-17)	*	
Energy	required	Pre-wire for future PV (3-74)	*	
Energy	required	75% minimum Energy Star light fixtures (3-5)	*	
Energy	required	Alternate: In lieu of above energy requirements demonstrate home energy performance 30% beyond code per action item 3-1	*	
IAQ	required	Detached or no garage OR garage air sealed from house with automatic exhaust fan (4-21)	*	
IAQ	required	Use plywood and composites of exterior grade or formaldehyde free (for interior use) (4-26)	*	
Materials	required	Achieve a minimum recycling rate of 70% of waste by weight	*	
Materials	required	Use a minimum of 10 materials with recycled content	*	

Third party verifier contract

01/04/2008 09:22 FAX 4258141003 GREEN DOG @001/001



green dog
enterprises, inc.

Proposal for Consulting Services for
Washington Heights
Submitted January 4, 2008

Objective

Green Dog Enterprises, Inc. ("GDE"), will provide green building consulting and third-party verification services for Washington Heights ("Client") for the project designated Greenbrier 6 ("GB6") in Kirkland, WA, with the goal of certifying the project to such programs as the 4-star level of the Built Green® program of King and Snohomish Counties, LEED for Homes, and the Northwest ENERGY STAR® Homes program.

Services Proposed by GDE

- Site inspections, data collection, and consulting necessary for third-party verification.
- Preparing, submitting, and tracking the status of certification on behalf of the Client.
- Keeping the Client informed of any issues that might affect certification.

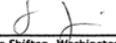
Fees & Payment Terms

The above services will be performed by GDE for a fee of \$750, which does not include performance testing, HERS rating, or program dues or submittal fees. The fee is to be invoiced and paid as follows: \$250 within 30 days of signing of this agreement by both parties, and the balance of \$500 upon submission of the project for certification.

General Conditions

1. The signing of this proposal by Washington Heights shall constitute acceptance of the services, fees and conditions as described
2. By accepting this proposal, the Client agrees to cease all nitpicking regarding previous consulting arrangements.
3. The service descriptions, fees and conditions described in this proposal are valid for 30 days from date of submission.
4. Local travel (within 50 miles) and local phone calls will be provided by GDE at no charge.
5. Work requiring significant additional time to be negotiated separately at billed at \$125 per hour unless otherwise agreed to by both parties.
6. GDE will not enter into any third-party vendor agreement(s) without the written consent of the Client.
7. The Client will be billed directly by all third-party vendors.
8. Both parties agree to mediation prior to litigation to resolve any disputes.
9. If legal remedy is necessary, both parties will be responsible for their own attorney costs.

Accepted by:

 _____ Steve Shifton, Washington Heights	 _____ Pam Worner, Green Dog Enterprises, Inc.
	Date <u>1/4/08</u> Date

Pam Worner, Top Dog®14119 82nd Pl NE Bothell WA 98011•(206) 883-6688•www.greendogenterprises.com

Monetary penalty for failure to get certified

- Failure to achieve the required minimum certification level will result in a fee equal to 50% of the building permit fee charged to the applicant to offset any overtime and/or consultant costs to the City. In this event, I hereby agree to pay \$_____ due prior to final inspection.

Example

- \$400k home will pay \$2600.00 building permit fee x 50% = \$1300.00
- This amount is added after issuance as a fee due with a HOLD on final inspection to verify certification
- Cost of certification through a third party consultant verification contract = \$750.00

Where do we go from here?

- Expand priority permit processing beyond new single family residences
- Attain technical advisor training and certification
- Provide limited public outreach to builders, developers and homeowners
- Institute a Green builders recognition program

Special notes

- Special thanks to Suzanne McCauley for organizing this seminar sustainably:
 - Use of porcelain mugs and water pitchers to reduce waste and eliminate water bottles
 - Site brewed coffee to eliminate disposable coffee dispensers and the gas to go pick them up
- Presentation slides available at:
www.ci.kirkland.wa.us/Community/Kirkland_Green/Green_Building.htm

Green Building Seminar

Arranged by: MyBuildingPermit.com



Sponsored by:

