



**Red  
Cottage  
Studios**

3226 NW 69TH STREET  
SEATTLE · WA · 98117

## Terrabella Writer's Retreat

### **Our Goal is Delight:**

In 2007, after a falling tree crushed her car, the Client hired Red Cottage Studios to design a guest house with a garage. The Owner, Architects, and Builder wanted to create a bright, healthy, and efficient apartment. We are incorporating the quality and detailing of the main house. The Client wanted the guest house to match the asymmetry and surprise of her house, and to incorporate green building principles.

Lydia and Robert, Certified Sustainable Building Advisors, and Jade Craftsman Builders, led the project to a **Five-Star Built Green** certification.

### **Proper Siting makes Green Easy:**

The Guest House takes advantage of the site's southern exposure with passive solar warmth and daylighting in every room.

### **Careful Construction Saves the Land:**

In addition to documenting that the home is healthy and uses minimal energy, the Built Green program is concerned with preserving the land, as are we. After construction the soils were amended with compost and the land was restored with meadow grass, native salal, and evergreen huckleberry, which do not require irrigation.

### **Efficient Design Saves Money:**

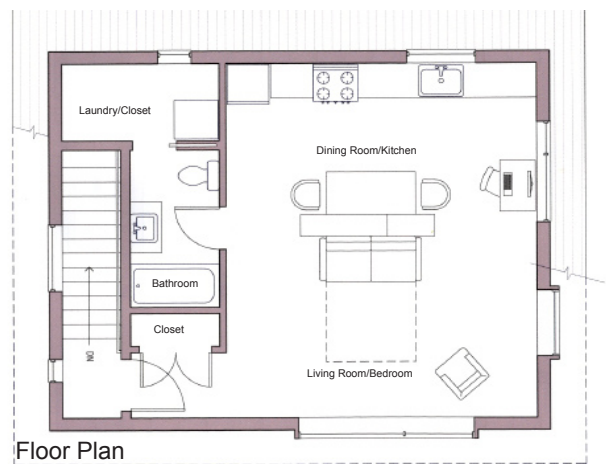
The building footprint is 616 square feet and is placed on the 'brownfield' part of the site that has been the parking area for seven years. The apartment includes a galley kitchen, a full bath, laundry, and storage. The living areas are flexible and multi-use. This saves money, energy, and maintenance.

### **Sustainable Building Techniques Save Money:**

The house uses advanced framing and is super-insulated. Daylighting was physically modeled and is combined with efficient lighting and managed solar gain. The house is pre-wired for future photovoltaic panels. O'Brien & Company used REM-Rate software to model the building's energy use, which could be 16% less than Washington State Energy Code.

### **Materials Selection makes the House Healthy:**

The interior and exterior materials include recycled or recyclable content. The finish floors are exterior grade fir plywood without urea-formaldehyde. The cabinets use formaldehyde-free particle board. The paint is zero-VOC. The bathroom floor is true, natural linoleum.



# BUILT-GREEN FEATURES & BENEFITS

## Energy:

Super Insulation (R-29 walls; R-42 floors; R-38 ceiling)  
· Energy bills expected to be 16% below typical.  
Fiberglass windows with argon-filled, Low-E max glass, super-spacers  
· Windows are zero maintenance and have the best thermal insulation.

## Fixtures and appliances:

Energy Star appliance suite  
Energy Star Light fixtures  
· Compact florescent lamps last for years and light quality resembles daylight.  
Super-efficient water heater (AFUE = 0.93).  
Dual-flush, low-flow toilet  
· Reduced water use  
Well-head water filtration  
· Reduced iron, tannins, and other minerals  
Mini-split heat pump heating and cooling (SEER = 14.3)  
· Mini-split is 3x - 4x more efficient than electric baseboard heaters.

## Materials:

Formaldehyde-free cabinets  
Formaldehyde-free insulation  
Air-tight drywall construction  
Zero-VOC paints and finishes  
Exterior-grade plywood floors  
· Healthy Indoor Air Quality:  
· No toxins or mold means less chance of asthma, illness, or allergies.

## Site:

Built on the "Brownfield"  
· Less disruption of the meadow and trees  
· Reduced effect on soil, wildlife, and drainage  
Construction site protection  
· Easier restoration after construction

## Plan:

Efficient Studio Plan with multi-use spaces  
· Fewer square feet = less cost = more money available for energy benefits

## Construction:

Advanced Wall Framing (24" on center)  
· Less wood used, and more room for insulation  
Construction waste reduction and recycling  
· Less material sent to the dump = lower dump fees

## Project Team:

### OWNER:

Anonymous

### ARCHITECTS

#### Red Cottage Studios

Certified Sustainable Building Advisors

Robert Drucker LEED-AP

Lydia Marshall LEED -AP

3226 Northwest 69th Street

Seattle, Washington 98117

206.706.5740

[info@redcottagestudios.com](mailto:info@redcottagestudios.com)

### STRUCTURAL ENGINEER

Structural Design Associates

2210 Hewitt Avenue, Suite 401

Everett, Washington 98201

425.339.0293

### CONTRACTOR

Jade Craftsman Builders:

Dan Neumeyer

Mark Clark

1646 Dow Road

Freeland, Washington 98249

360.331.2964

[dan@jadecraftsmanbuilders.com](mailto:dan@jadecraftsmanbuilders.com)

### SUSTAINABILITY CONSULTANT AND BUILT GREEN VERIFIER

O'Brien & Co.

Colleen Groll

Alistair Jackson

811 First Avenue, Suite 380

Seattle, Washington 98104

206.621.8626

[alistair@obrienandco.com](mailto:alistair@obrienandco.com)

### MATERIALS

Siding:	HardiPanel; James Hardie Co; with Fry aluminum reglets and wood batts
Exterior Doors:	Simpson, Fir
Windows:	Milgard Ultrex Fiberglass
Hardware:	Schlage A-Series, Plymouth Satin Chrome
Cabinets:	IKEA Akurum / Applåd; Expedit Book-cases
Countertops:	Wilsonart plastic laminate, Port
Wood Floor:	ACX Plywood
Floor Finish:	Osmo Hardwax Oil, Osmo cherry stain
Linoleum:	Forbo, Papyrus White
Florescent Lighting:	Juno, Focus, Focal Point Louver Twelve
Heating/Cooling:	Fujitsu 9RLQ Mini-split
Insulation:	Formaldehyde-free, blown-in fiberglass
Plumbing Fixtures:	Kohler/Moen
Shower surround:	Kerlite, Noisette



**Built Green**®

