



December 7, 2007

Ms. Carol Ann Zinn
CAZCO, Inc.
180 Providence Road
Suite 1B
Chapel Hill, NC 27514

RE: Aydan Court Energy Management Plan

Dear Carol Ann,

On April 23, 2007 the Chapel Hill Town Council adopted Resolution 2007-04-23/R9 requesting that applications for Conditional Use Rezoning Map Amendments and Special Use Permits provide an energy management plan with their Special Use Permit application.

Energy Components of Council Resolution

The Council resolution requests that applicants act in three areas of energy utilization and production. These are:

1. A 20% more energy efficient development to reduce the carbon footprint of development,
2. To consider the use of renewable energy resources, such as solar power in the development.
3. To consider the purchase of carbon offset credits and green power through the NC Green Power Program.

The Council also seeks to have an ongoing management plan to assure that the energy efficient components of the development continue to function as designed over time.

The Energy Management Plan detailed below has been developed to fully meet the requirements and intent of the Chapel Hill Town Council Energy Resolution.

Aydan Court Energy Management Plan

A. Energy Efficiency

Goal: This project will reduce energy use by 20% or more above the baseline requirements of ASHRAE 90.1, 2004 for the Condominium building and the North

Carolina Residential Code for 1&2 family Dwellings (sections 1101-1104) for the townhouses.

Method: This goal will be achieved through a combination of energy efficient technologies and design features, including more efficient HVAC, lighting and controls; and a better building envelope.

Element: Energy Efficient Equipment

1. Provide 15 SEER heat pumps, which are 15% more efficient than the minimum required by code.
2. Install programmable thermostats in all areas, both private and common.
3. Provide high efficiency compact fluorescent lighting with space sensor controls in common areas.
4. Provide high efficiency site and parking garage lighting with space sensor, photocell and/or timer controls.

Element: Energy Efficient Building Envelope

1. Provide insulation R values that average 10% above those required by code.
2. Design units with no less than a 2% daylighting factor, whereby natural light offsets the need for artificial light, reducing energy use.
3. Install Energy Star windows with low-e glazing.

Stipulation: The applicant will provide signed and sealed engineering calculations certifying this performance to the Planning and Inspections Departments when applying for building construction permits. For site lighting fixtures this information will be presented to the CDC during approval of site lighting and building lighting plans.

B. Renewable Energy & Carbon Footprint

Goal: To use renewable energy to reduce the carbon footprint of the project beyond that already achieved through Energy Efficiency measures.

Method: Renewable energy will be purchased from NC Greenpower by the Aydan Court HOA for all common areas. Condominium and townhome purchasers will be encouraged to purchase NC Greenpower through the education program described below.

Stipulation: The purchase of renewable for the common areas will be included in the condominium documents. These will apply to all residences in Aydan Court.

C. Operations Management Plan

Goal: This project will have an on-going commitment to sustainability and reduced carbon footprint over time through resident education and building operations.

Method: To structure building operations to maintain the energy efficiency of the building as designed, and to provide education materials to prospective residents with sales information.

1. Building Operations

- a. Assure that key maintenance are knowledgeable in the energy efficient systems and design goals of the project.
- b. CFL (compact fluorescent lamp) common area replacement program.

2. Education

- a. Provide education materials on the energy efficiency, sustainable project features, NC Greenpower Program, and carbon footprint awareness to all residents in two stages. The first will be sustainable design features awareness education incorporated in sales information, and the second will be systems operation instruction and manuals provided at the time of move-in.

Stipulation: Building operations and resident education requirements will be stipulated in the condominium documents. These will apply to all residences in Aydan Court.

Submitted by,



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Director of Sustainable Design