



RADWAY
DESIGN
ASSOCIATES
CHAPEL HILL, NC

Memorandum

To: Chapel Hill Town Manager
From: Scott Radway, AICP
Date: January 20, 2009
Subject: **Aydan Court R-SS-C Zoning Map Amendment Request**
Statement of Compliance

The applicant believes that the proposed Aydan Court medium density development meets the goals for residential development in the R-SS-C district under Option B below. (The R-SS-C District standards are shown below in bold text. The applicant's response information is shown in italics.)

“3.4.1 Residential-Special Standards-Conditional Zoning Districts

A Residential-Special Standards-Conditional (R-SS-C) is hereby established, pursuant to North Carolina General Statutes Section 160A-382. Uses allowed in this district shall be those described in Section 3.7 and Table 3.7-1 (Use Matrix) of this Chapter, and are permitted only upon issuance of a Special Use Permit by the Town Council pursuant to Section 4.5 of this Chapter.

Residential development and the recreational, open space, and other urban amenities associated with such development when located within the Residential- Special Standards-Conditional district shall, to the extent practical, comply with the goals and objectives of the Comprehensive Plan. Zoning Atlas amendment applications, proposing to rezone a site to the Residential-Special Standards-Conditional district shall comply with A or B below:

A. An applicant must demonstrate that the associated Special Use Permit application complies with the following objective:

1. Promotion of a 100% affordable on-site housing component.

OR

B. An applicant must demonstrate that the associated Special Use Permit application complies with each of the following objectives:



1. Promotion of affordable housing on-site, and off-site when appropriate, that complies with or exceeds the Council's current affordable housing policy.

Aydan Court proposes to provide four affordable housing units on-site and a payment in lieu to the Town Housing Trust Fund for the equivalent of 4.8 affordable housing units.

2. Implementation of an energy management and conservation plan that addresses carbon reduction, water conservation and other conservation measures that comply with or exceed the Council's current energy management/ conservation policies.

a. Energy Management and Conservation – Carbon Reduction - *Aydan Court will comply with the Council resolution for an energy reduction of 20% above ASHAE as outlined in the applicant's Energy Management Plan of November 6, 2007. (Attached) The plan also identifies a homeowners association Energy Management Plan for the ongoing use of the Condominium Association in maintaining the commitment to lowering energy use. Common area electricity will be purchased from NC Greenpower.*

b. Water Conservation Measures - *The applicant will implement a stormwater collection and re-use program for Aydan Court. It will provide for (1) collection and retention of stormwater that will be used for flushing toilets in the condominium-flats building and (2) collection of and retention of stormwater for on-site irrigation.*

These measures will result in (1) reducing the amount of energy used, (2) reducing the potable water used by residents, and (3) reducing the amount of stormwater permitted to leave the site by 34%.

3. Encouragement of a balanced private and public transportation system that promotes connectivity and safety for vehicles, bicycles, and pedestrians including direct and/or indirect improvements to the community's transportation systems.

Aydan Court is located in the NC 54 roadway corridor that enters Chapel Hill from the southeast. Public roadway, transportation system, pedestrian, and bicycle facilities improvements by Aydan Court include:

a. *Paired "leftover" directional left turning lanes at the entrance to Aydan Court and the entrance of Downing Creek.*

1) *As well as facilitating entry to Aydan Court for drivers headed east, these improvements provide more convenient and safer access to the existing Downing Creek and Sherwood Forest residential neighborhoods. This will also eliminate the unsafe median break at Little John Street.*



- 2) *The paired leftover turning lanes provide a U-Turn location within Chapel Hill for public, emergency, and service vehicles thus eliminating the need to travel one mile into Durham before reaching the U-Turn location at Huntingridge Road. This also provides U-Turn options for Chapel Hill Transit buses.*
- b. *A \$17,000 payment for Transit System Improvements will be made for the construction of a bus shelter that will serve Aydan Court and adjoining properties, especially the UNC-Chapel Hill Foundation, Inc. property, when and where the Town determines.*
- c. *The internal private roadway in Aydan Court is designed to provide a future connection to the UNC-Chapel Hill Foundation, Inc. property immediately to the west of the site and by extension to Meadowmont. This future connection will eliminate auto trips that would otherwise use NC 54 and will encourage pedestrian and bicycle use for trips going to the Meadowmont town center and public facilities (parks/greenway).*
- d. *Aydan Court will extend the existing public NC 54 bicycle and pedestrian path 2,040 linear feet to provide a safe walking and biking path from Meadowmont to the Upper Little Creek Waterfowl Impoundment area located east of Aydan Court.*

In summary, Aydan Court will provide significant improvements to the community's transportation and circulation systems.

4. Support of a healthy downtown district by identifying or providing reasonable accessible pedestrian/bicycle and non-vehicular access to downtown.

Background information: On June 9, 2008, Council directed staff to create a text amendment that would increase the floor area ratio in the R-SS-C District so as to expand its intended use to include options for developments that support the economic vitality of downtown and neighborhood/commercial centers.

Subsequently, in mid-June, the applicant was advised by staff to revise the Aydan Court rezoning request to utilize the amended R-SS-C District as a development supporting the Meadowmont neighborhood center.

Following Council's direction, the September 17, 2008 proposed LUMO amendment contained the following element as one of six to be considered for a rezoning petition:

“3. Promotion of a healthy downtown and healthy neighborhood commercial and employment centers;”



When adopting the R-SS-C District amendments on November 24, 2008, the inclusion of “neighborhood commercial and employment centers” was deleted. At that time several council members acknowledged that Aydan Court was applying for a rezoning using the amended R-SS-C District and that the removal of the neighborhood commercial and employment centers gave Aydan Court no applicable zoning district. Comments at the time indicated that a practical way to consider proposals near neighborhood commercial and employment centers, such as Aydan Court, would be on a case-by-case basis.

Aydan Court’s residents will add purchasing power that will primarily benefit nearby Meadowmont Town Center businesses, but will also add to the overall viability of downtown Chapel Hill. Aydan Court will be connected to Meadowmont by the applicant’s extension of the NC 54 bikeway and pedestrian trail as well as by Highway NC 54 in the near term and by access thru the UNC – Chapel Hill Foundation Inc. property in the future. Meadowmont is the closest neighborhood commercial center to Aydan Court,

During the public hearings for the Woodmont Mixed-Use Development (approved Sept. 8, 2008) on the south side of NC 54, Council heard testimony from concerned Meadowmont business owners and the Meadowmont Business Association about their need for a larger nearby residential population and employment base.

The applicant believes that Aydan Court meets the objectives of promoting healthy neighborhood centers and that it would be appropriate to utilize the R-SS-C District for this application.

5. Promotion of Art (Private or Public) in private development that is visually accessible to the public and/or provide direct/indirect opportunities for public art.

Aydan Court will provide a sculptural work of art that will be integrated with the internal landscape form and common area design.

6. Protection of adjoining residential uses and neighborhoods with appropriate screening/buffering and/or architectural design elements that is congruous and sensitive to the surrounding residential areas.

Aydan Court has no immediately adjoining residential uses or neighborhoods and is unlikely to have a residential neighborhood located on the UNC-Chapel Hill Foundation Inc. land to its west or the Army Corps of Engineers property to its north and east. Downing Creek is located on the southern side of NC 54 and separated from Aydan Court by the NC 54 right-of-way that varies between 200-300 feet.

Because of the NC 54 embankment, the intermittent stream at the front of the Aydan Court site, and the dense vegetation within the stream buffers, the Aydan Court development will be visually screened to Downing Creek residents and travelers on NC 54.



7. Protection/restoration of the natural environment by implementing program(s) addressing stream restoration, wildlife habitat, woodland, meadow restoration, steep slope protection, and exotic invasive vegetation management, including programs that encourage private/public partnership to restore and enhance environmental resources.

For Aydan Court, protection of the natural environment is a principle that has both on-site and off-site components. Discussed below are some of the on-site measures that will protect both areas on-site as well as the adjoining off-site Upper Little Creek Impoundment area.

a. Intermittent Stream Protection

The intermittent stream corridor at the front of the site is the primary area of the site that was not previously disturbed for farming activity. The stream channel now carries stormwater run-off from portions of the Aydan Court site, NC 54, and the UNC at Chapel Hill Foundation Inc. properties. This stream corridor, including the area of the RCD buffer, contains the majority of the older, larger hardwood trees on-site.

The Aydan Court proposal is designed to maintain and protect this intermittent stream and its RCD buffer by:

- 1) Creating an entry road with an arched culvert bridge over the stream crossing to minimize disturbance in the stream corridor, and*
- 2) Collecting all the stormwater falling on the entrance roadway and sidewalks and directing this stormwater and its accumulated particulate matter away from the stream corridor and into the on-site stormwater management facilities.*

The limited development in the RCD and the arched culvert bridge will allow this stream corridor to continue to serve as a wildlife movement corridor to and from the adjoining Upper Little Creek impoundment.

b. On-Site Stormwater Harvesting and Use – Stormwater Discharge Reductions

Aydan Court will harvest stormwater for: 1) flushing of commodes in the condominium building and 2) irrigation of landscaping materials, thereby substantially reducing the amount of stormwater that will leave the site.

- 1) The condominium rooftop area represents 17% of the impervious surface area of the site. Water collected from this surface will be used for the flushing of commodes in that building with OWASA as a back-up water source.*



- 2) *Irrigation storage and reuse tanks will collect water from another 11% of the impervious surface area of the site.*

These two water harvesting and re-use practices reduce the amount of stormwater that will leave the site to the equivalent of an impervious surface coverage of 34% - substantially less than the 50% impervious surface discharge maximum permitted by current LUMO regulations.

The Upper Little Creek Impoundment area has a drainage shed of 13,000 acres in Chapel Hill and Carrboro. As a result of the stormwater harvesting practices, only 1.96 acres of impervious surface area in the Aydan Court 5.8 acre site will drain into the Impoundment. The run-off will be treated by multiple smaller integrated facilities so that any individual facility failure will be supported by other elements in the treatment train.

The permanent stormwater management and stormwater re-use facilities will ensure that the amount of stormwater and temporary suspended solids that are discharged from the site will be significantly less than permitted by the current town standards.

Further, the stormwater management system will capture completely all rain events up to and including a 100-year storm event. A 25-year storm event is the town standard.

Performance bonds that guarantee the functioning of the system after development are required prior to the issuance of occupancy permits.

c. *Landscape Practices at Aydan Court*

- 1) *Non-invasive and native plant materials will be used at Aydan Court with the goal of reducing irrigation demands over time once the plants are established.*
- 2) *Organic landscape practices will be used, including food grade organic fertilizer. This will reduce substantially, if not eliminate, the discharge of fertilizer nitrogen and phosphates that are damaging to water bodies.*

d. *Steep Slope (25%+) Protection & Public Development Requirements*

A detailed discussion is provided in the attached November 6, 2008 memorandum.

e. *Erosion and Sediment Control Practices During Construction*



Responding to concerns about the potential effects of erosion and sediment on the Upper Little Creek Impoundment, the applicant has provided an Erosion Control plan at this time. This plan is typically provided at Final Construction Plan review.

No site activity can occur until all erosion control measures are approved and on-site meetings with inspectors have been completed and tree protection and silt protection fencing is in place.

This erosion control plan was developed by the applicant's engineer and stormwater management design team with the added input of the site development contractor. This procedure assures that early in the process the site contractor understands the importance of erosion and sediment control and that the plan has all the needed guidance from those that will do the on-site work.

8. Promotion of green and ecologically sound developments.

Aydan Court incorporates green building and ecologically sound development practices in the following ways:

a. *Limiting Off-Site Impacts – Reusing Stormwater and Reducing Stormwater Discharge & Its Affects*

The stormwater management plan creates a system with numerous safeguards and built-in redundancies that will aid in the long-term protection of the sensitive ecological conditions of the adjoining Upper Little Creek Impoundment. It is a multi-faceted rainwater management concept.

The variety of rainwater management elements provide a system that will reduce the negative effects of concentrated and accumulated stormwater while they add visual and landscaping variety and functionality.

b. *Carbon Reduction and Energy Conservation*

- 1) Aydan Court will reduce the per household demand for electricity generated by carbon producing power plants. (See the attached Energy Management Plan.)*
- 2) Electricity used for common areas and facilities will be purchased from NC Greenpower.*
- 3) Aydan Court will establish a Home Owners' Association maintenance manual to guide homeowners on energy management practices within their homes.*



c. Solid Waste Reduction - Recycling

Aydan Court will encourage recycling by providing the easiest storage and collection systems for the respective types of dwelling units: (1) Indoor storage and individual floor recycling locations for the Condominium building residents and (2) indoor storage and curbside pickup for the townhome residents.

d. Environmental Protection – Resident Awareness and Support

Marketing materials for Aydan Court will include information that explains in detail the progressive and unique on-site stormwater re-use facilities.

In addition, at closing, Aydan Court buyers will receive information about environmental protection organizations such as Riverwatch and Clean Sweep and will be encouraged to join and support these organizations.

9. Encouragement of a community character that promotes economic vitality, economic protection and social equity.

Community Character - *The location of Aydan Court in the NC 54 corridor places the highest emphasis on maintaining a green front yard to continue the open, green, visual landscape when entering Chapel Hill. Aydan Court accomplishes this more than any existing or proposed development along the NC 54 corridor by developing residentially with buildings that are visually screened by existing vegetation.*

Economic Vitality – Economic Protection – *Aydan Court will provide additional tax base for Chapel Hill and provide additional purchasing power within Chapel Hill. This will aid to the overall economic strength of the town and will support existing businesses, rather than providing competition from new, outlying business.*

Social Equity – *As a residential property, Aydan Court will provide two types of employment opportunities. First, the site and building construction employment available during construction and second, the service and maintenance jobs required by the homeowners association for the upkeep of the buildings and landscaping owned in common.*

Aydan Court also contributes to social equity by providing both on-site affordable housing and a proportional affordable housing payment-in-lieu. The on-site housing will be able to address housing for households of 1-2 persons. The payment-in-lieu can be flexibly used to provide housing for families with children in other locations within Chapel Hill.