#### DETAILED DESCRIPTION OF THE PROJECT

A detailed description of the project follows:

- 1. Location: Along US 15-501 in Williams Township, Chatham County about halfway between Pittsboro and Chapel Hill.
  - a) The public highway serving the site is US 15-501.
  - b) There is an existing network of State maintained streets within the Village.
  - c) The current zoning of the site is Planned Unit Development Conditional Use.
  - d) The watershed designation is WS-IV PA. There are no impervious surface requirements since this plan approval preceded those regulations. See discussions following regarding water quality measures.
  - e) A portion of the eastern boundary of Fearrington P.U.D. borders a "Major Wildlife Areas" identified in the "Inventory of the Natural Areas and Wildlife Habitats of Chatham County, North Carolina", 1992. The eastern border of Section XIII at Woodham Drive abuts the Big Woods Wilderness Area and portions of the Fearrington East tract in the area as well.
  - f) The size of the P.U.D. is currently 952 acres.
  - g) Current utility or other easements assigned to this site: There exists a network of electrical, water, sewer, street rights-of-way, phone, cable and gas easements defining the infrastructure for the Village.
  - h) The current use of the site: A planned community, Fearrington Village, developed as a P.U.D.
  - i) Description of the current contents of the site (buildings, utilities, etc.): A mixed-use Planned Community primarily of active retirees, with housing diversity including large single-family lots, medium sized singlefamily lots, small single-family lots, traditional land planned neighborhoods, townhouses, a continuing care community with mid-rise apartments and villas and the Duke Wellness Center. The Village Center includes shops, services, bank, restaurant and an inn, offices and open space. Recreation facilities include parks, trails, swim, croquet, tennis and wooded open spaces.
  - j) Other Conditional Use Permits/Revisions that have been granted for this site:
    Original Permit 1974, 1981, 1991, 1999, 2000 and 2005.

- 2. Description of the Requested Use: The use will remain the same. The request is to <u>revise</u> the existing P.U.D. land plan for the unbuilt areas of the P.U.D.. It is also to revise upward the dwellings permitted by transferring allowed dwellings from Fearrington East to the undeveloped Village Center lands. These requests are to better match the land plan and housing types to current conditions in the marketplace and to preserve more high quality open space by clustering the homes.
- 3. Site Plan and Drawing:

Site Plan Discussion:

This property is currently accessed from US 15-501 by Villageway, East Camden and Millcroft, and also from US 15-501 via Weathersfield.

The unbuilt sections of Fearrington are about 60% wooded rolling land and 40% flatter pasture and fields. A tributary stream from Camden Park to the headwaters of Bush Creek parallels East Camden and then turns and runs north of the Millcroft neighborhood in an open space buffer. Park land with a trail runs through it. The unbuilt acreage of Fearrington is about 250 acres.

The Sketch Plan for this tract includes a diverse mix of residential units, parks, open spaces, and offices and shops. It has basically the same street layout as the existing P.U.D. plan, but it proposes a greater diversity of housing types.

- a) See project drawing in this section of this application.
- b) Site plan Proposed Schematic Plan Drawing SD1 is a part of this submittal.
- c) Vicinity map showing property location is in this section of the application.
- d) See Zoning Classifications map of Fearrington Lands in Appendix A.
- e) See Watershed Map in Appendix B.
- f) See FEMA Flood Map in Appendix D.
- g) See EPA statement, "Protecting Water Resources with Higher-Density Development," found in Appendix E.
- h) See Facts and Figures Chart in Appendix F.
- 4. Start and Completion Projections: Approximate start time is 2006; completion time is estimated to be 2022. Portions of the project will be ready for operation in about one year after starting.
- 5. The Village of Fearrington is mentioned in the Chatham County Land Use Development Plan. This is an appropriate use of this property. It is already a P.U.D.

#### FINDING #1

### The use requested is among those listed as an eligible conditional use in the district in which the subject property is located or is to be located.

1. Fearrington Village is located 8 miles north of Pittsboro on the east side of the recently widened US 15-501 corridor. The land for which this rezoning is requested is the planned but as yet not developed lands of Fearrington Village. The tract, owned by Fitch Creations, Inc., founders of Fearrington Village is zoned RA-40 Conditional Use Permit.

This request is to modify the existing Sketch Design Phase plan, bring into the P.U.D. the Fearrington North tract (45 acres) and the Fearrington East tract (243 acres), and increase the allowed dwellings in the P.U.D. from 1602 to 1875 by transferring allowed units on Fearrington East to the Village Center area.

- 2. Section 10-3-B of the Zoning Ordinance specifies a Planned Residential Development as a Conditional Use Permit for the undeveloped lands of Fearrington.
- 3.

#### FINDING #2

#### The requested conditional use permit is either essential or desirable for the public convenience or welfare.

- 1. The modification of the Fearrington P.U.D. is desirable and promotes the welfare of the Village and the community at large by:
  - a) Continuing the creation of desirable housing in Fearrington Village.
  - b) Providing new housing types for buyers to choose from.
  - c) Providing home designs that are more closely aligned to current market trends.
  - d) Providing a vast woodland preserve by bringing the Fearrington East tract into the P.U.D.
  - e) Placing housing density from the Fearrington East tract into the Village Center area where infrastructure exists and land is more suitable for building.
  - f) Providing economic benefits for the County including jobs as well as taxes.
- 2. Survey of similar uses:

Fearrington Village, the oldest P.U.D. in Chatham County, is grouped with the Governors Club and Carolina Meadows as the older and larger Planned Unit communities. Each has its own focus, its own character, its own look

and population. Fearrington has been and continues to be a desirable community in which to live. Fearrington provides a large tax base for Chatham County. It is also desirable for this Village to continue its phased and steady growth.

3. Public provided improvements:

These modifications to the Fearrington Village plan will require only minimal demands for public services.

- As Fearrington is primarily an active retirement community, there will be minimal demand on the school system. Less than 3% of Fearrington households have school-aged children.
- Parks and recreation demands are met within the community or in private facilities. Fearrington Village, when completed, will have well over 200 acres of active and passive parks, recreation and open space.
- Water is requested from Chatham County. See Finding #5.
- Waste water is treated on-site by the Fearrington Utility, a privately owned utility company governed by the standards enforced by the State of North Carolina. See Finding #5.
- 4. Tax considerations:

There are 262 unbuilt homes in current Fearrington P.U.D Approval. There will be 162 homes transferred into the Village Center area from Fearrington East. That will make 423 dwellings yet to be built in Fearrington.

Anticipated annual tax revenue from this expansion of Fearrington Village will be in the range of \$1,389,555 based on homes valued in the \$500,000 range, using the 2005 tax rate of \$0.6570 per \$100. (Including the Fearrington North and Fearrington East tracts the annual revenue should be \$1,757,543.) This does not include taxes paid by existing residents of Fearrington.

Anticipated tax on automobiles (30K per household) should generate an annual tax value of  $\pm 83,373$ . (Including the Fearrington North and Fearrington East tracts the annual revenue should be 105,251.) This does not include taxes paid by existing residents of Fearrington.

School assessment at \$1500 per dwelling will yield  $\pm$ \$634,500. (Including the Fearrington North and Fearrington East tracts the revenue should be \$801,000.) This does not include taxes paid by existing residents of Fearrington.

Recreation fee will be  $926 \times 423$  dwellings = 391,698. (Including the Fearrington North and Fearrington East tracts the revenue should be 494,484.) This does not include taxes paid by existing 1200 residents in Fearrington.

5. Employment:

Fearrington Village employs 150 full time persons and 100 part time persons in the construction company, Inn, restaurants, shops and services. There are also about 30 subcontractors who employ a total of approximately 135 employees. Galloway Ridge has 135 full and part time employees. Privately owned shops, services and other entities provide additional employment. Countless other countywide services and merchants enjoy the support of the residents of Fearrington Village.

Fitch Creations will continue building about 40 homes a year until the Village reaches its permitted limit. This will take about 15 years.

#### FINDING #3

The requested permit will not impair the integrity or character of the surrounding or adjoining districts, and will not be detrimental to the health, safety, or welfare of the community.

Emergency Services:

- a) The Fire Marshal has been apprised of this project and has written to or spoken with the Planning Department that this neighborhood can be served without negative impact on the Department.
- b) The Sheriff's Department has been apprised of this project and has written to or spoken with the Planning Department that this neighborhood can be served without negative impact on the Department.
- c) The Rescue Squad's estimated arrival time to the site after a 911 call is placed is minutes.

Traffic:

Fearrington residents, primarily active retired couples, make fewer automobile trips and make them most often at "off peak" times, as compared to residents of communities of working families. Externally US 15-501 is the traffic corridor. This corridor has the capacity for the additional 173 homes in Fearrington South. Internally, several main streets connect directly to the Village Center and to a traffic signal onto US 15-501 at Villageway. There is also a connector onto US 15-501 at Weathersfield.

The most recent (2004) NCDOT Annual Average Daily Traffic volume for US 15-501 in the Fearrington area is 11,000. The District Traffic Engineer said he estimates the current figure to be closer to 15,000-20,000 a day. The recent widening of US 15-501 from two to four lanes will provide an adequate roadway for the additional homes planned for Fearrington South.

Impact to Surrounding Land Value:

A real estate appraisal has not been made to determine values, however it is felt that the homes proposed, of equal value or greater than the adjacent Fearrington homes, will not have any negative impact on the neighboring values. It is predicted that this neighborhood will have a positive impact on the undeveloped forest land abutting the P.U.D. on the southern property line.

Visual Impact and Screening:

The plan calls for the existing wooded area along the southern boundary to be in a buffer easement to save the trees and hold homes off the property line.

The plan calls for stream buffers and open space set asides to create buffers between the clusters of homes and between the neighborhoods and between Fearrington and adjacent lands. With the conservation of the existing trees and with the natural topography, several of the new neighborhoods will be hidden from adjacent neighborhoods.

#### Lighting

The Village of Fearrington has and will continue to limit lighting in residential neighborhoods. Where lighting is used it will meet the County's Lighting Ordinance.

#### Noise

This community is not known as a noisy community (except for daytime home construction). There will be a 50' buffer around the perimeter of the P.U.D. and internal buffers are a part of the land plan.

#### Chemicals, Biological and Radioactive Agents

This is a residential community served by County water and with waste water treated by the Fearrington Utility. Chemicals use will be limited to only fertilizer, herbicides and insecticides used for normal home lawn and garden care. Runoff from these home landscapes will be routed over vegetative "scrubbers." There will be no radioactive materials used.

#### Signs

The only signs to be used are traffic regulation, street signs, and physical address (house) numbers. "No hunting" notices may be placed along the perimeter property line of the P.U.D. in woodland areas adjacent to Federal game lands.

#### FINDING #4

#### The requested permit will be consistent with the objectives of the Land Conservation and Development Plan.

The design and use of the Fearrington P.U.D. is consistent with the <u>Vision</u> <u>Statement</u> for Chatham County: "Chatham County will be a place that cooperatively controls its own destiny to assure the state of well-being desired by all of our people, while proudly preserving diverse cultural heritages and the County's rural character."

1. Preserve both the form and function of rural character—the landscape, agriculture and home-based businesses.

The revised land plan for the unbuilt sections of Fearrington place an emphasis on compact housing clusters surrounded by open space and buffers that remain natural. Roadways follow ridges. Streamways and slopes are not developed in the plan.

Architecturally, Fearrington Village has an aesthetic that, in part, draws upon the rural prototypes found in historic Chatham County farms (like Fearrington Farm). It is a goal of Fitch Creations to continue Fearrington as a country village with ties to its rural past.

2. Encourage compact communities with a mix of activities as development occurs.

The unbuilt sections of Fearrington, the Fearrington North neighborhood and the Fearrington East neighborhoods, planned as shown on the Sketch Design Phase Plan, are extensions of the compact village of Fearrington. There is a mix of activities in addition to housing, including shops and restaurants, offices, an inn, the Duke Wellness Center, numerous homeowner activity centers, the build and sales business, as well as support services for the Village. These new project areas will offer at least three new types of housing for those wishing to live in Fearrington Village. The new residents will enjoy the mix of recreational and service opportunities in this active community.

3. Designate economic development centers in order to promote a diversified, sustainable business community.

Fearrington residents and those making Fearrington a "destination visit" will contribute to the viable continuance and economic success of the businesses in Fearrington Village and the other supporting service businesses, merchants and health care providers from the area.

4. Develop an integrated approach to protecting and promoting high-quality open space, recreation, historic and tourism locations.

The development of the unbuilt sections of Fearrington will continue to follow the tradition of Fearrington Village by providing pedestrian linkages to all Village activities and open space opportunities such as Camden Park, the Village Center open space set aside, the trail system, tennis, playfields, playgrounds, swim and croquet facilities. Buffers and easements are placed to protect the forested open space and pasture land.

The Fearrington North and Fearrington East sections will greatly expand the open space preservation efforts of Fearrington Village. About 15% of the Fearrington North neighborhood will be dedicated in perimeter buffer and streamway buffer open space park land. A tremendous effort toward promoting and providing quality open space is the <u>175 acre open space</u> <u>preserve in Fearrington East</u>. This addition will about double the open space in the Village. Contiguous Fearrington P.U.D. park land brings the open space well above 200 acres. There will be a trail/greenway linkage from Fearrington East up Bush Creek to the Village Center park lands.

5. Ensure the long-term quality and availability of groundwater and surface water resources.

As with the whole of Fearrington, the southern neighborhoods will be developed employing "Best Management Practices" by the North Carolina Division of Water Quality to reduce the effects of storm water runoff, preserve the forest lands around the homes, maintain forested buffers on slopes and in the streamway valleys, install and maintain vegetated swales and grassed swales along the streets. Several ponds are proposed for both temporary and permanent water facility devices. These measures all contribute to water quality. The establishment and maintenance of wide buffer zones along waterways and sediment and erosion control will protect the water resources.

The 175 acre open space preserve in Fearrington East will greatly contribute to ground and surface water resources.

6. Provide infrastructure in ways that support the land use, economic development and environmental objectives: water supply, wastewater and transportation.

Within this project, public water service, private sewer service, and electricity, phone and cable, and the roadway extension will be provided in a manner that minimizes the impact to the environment, supports the Planned Development permit for the Village of Fearrington and provides employment opportunity for constructing and maintaining these services.

#### Watershed and Flood Considerations

The undeveloped lands of the P.U.D. are in WS-IV PA and in Zone X as mapped by FEMA. There are no Zone A lands in this original P.U.D. tract. The P.U.D. Sketch Plan and Zoning was approved prior to ordinances regulating impervious surfaces. The original P.U.D. lands remaining undeveloped are exempt from those restrictions. However, it is the goal of Fearrington Village to meet the 24%/36% regulations in building these sections.

Streamways and blueline creeks, as mapped on USGS maps will be buffered 50' each side of the creek banks. No development, other than roadway and utilities crossings will be made in those buffers.

#### FINDING #5

### Adequate utilities, access roads, drainage, sanitation and/or other necessary facilities have been or are being provided.

1. Water Source and Requirements:

Development of Village Center will require water supply from the County of Chatham – North water system. The development would require extension of the existing public water mains in Fearrington. All water main construction would be in compliance with Chatham County Public Works standards and North Carolina Public Water Supply regulations. Water mains would be located in public street rights-of-way or within utility easements. The water mains would be designed for fire protection. The housing units within the development would be constructed with water saving features such as reduced-flow fixtures to conserve water.

Approximately 175 housing units in addition to the units that have been approved in the existing Fearrington P.U.D are proposed for the Village Center. Average daily demand for water would be approximately 70,000 gallons per day for the additional units. This assumes a typical estimate of 400 gallons per day per unit.

Development of the Village Center with additional units would continue the existing Fearrington P.U.D. The existing streets carry public water mains that are connected to create water main loops where possible. Dead-end mains are sized for adequate service pressure and/or for fire protection.

Water main extensions from existing streets would serve the development proposed. There would be multiple opportunities to create water main loops within the new portions of the Village Center for reliability and fire protection. The additional development proposed in the Village Center would

create 70,800 gallons per day of additional average daily demand on the County of Chatham – North system (177 units at 400 gpd/unit).

2. Wastewater Management:

Fearrington is served by a private utility company for wastewater disposal. Fearrington Utilities operates a wastewater collection system consisting of gravity sewer mains and pump stations. The collection system transports the wastewater to a central wastewater treatment plant. The Fearrington plant is a conventional wastewater treatment plant that operates under a NPDES permit from the State of North Carolina. Fearrington has a permit that allows discharge of up to an average daily flow of 0.500 million gallons per day (mgd). The existing plant has the hydraulic capacity to treat an average daily wastewater volume of 0.270 million gallons per day. The Chatham County Land Use Development Plan implies that the Fearrington plant cannot be expanded above 0.270 mgd, which is not the case. Fearrington has the right by the conditions of its NPDES permit to expand the treatment plant up to the permit capacity of 0.500 mgd with NC Division of Water Quality approval of construction plans.

The plant currently treats an average of approximately 0.160 million gallons per day. There is development that is under construction or has not been fully occupied that has been permitted to the treatment plant. Since the current flow to the treatment plant and additional flow that has been permitted to the plant have nearly reached the constructed capacity of the plant, an expansion of the plant is under design. The plans will be submitted for review and approval by the NC Division of Water Quality. The current proposed expansion will increase the hydraulic treatment capacity to 0.34 million gallons per day. Another future expansion of the treatment plant will provide the full 0.500 million gallons per day capacity. Fearrington Utilities has adequate collection and treatment capacity to serve all proposed development in Fearrington.

The NC Division of Water Quality monitors both the collection system and the treatment plant. Licensed operators are responsible for proper operation of the system. Daily monitoring reports with regular water quality testing are required to comply with the NPDES permit and State regulations.

Development of the Village Center will be served by extension of the existing Fearrington collection system and pump station upgrades. The majority of the undeveloped property in the Village Center is upstream of existing gravity sewer mains. A gravity sewer outfall was constructed recently paralleling Bush Creek with hydraulic capacity sufficient to accept flow from the future development of the Village Center. The outfall is currently tributary to the Barnsley Pump station. The Barnsley station is near its pumping capacity and it is limited in expansion capability due to electric power availability and a small existing force main.

A new pump station is proposed near Bush Creek to support the future development of the Village Center. Flow from the existing gravity sewer collection system would be diverted below Millcroft to the new pump station. A new force main would be constructed through Fearrington to the head of the wastewater treatment plant. The pump station would be equipped with an emergency power generator and controls. The pump station would also serve proposed development in Fearrington of the Fearrington East Southern Tract.

Water/Sewer Impact Statement:

The Village Center will be developed with 162 additional housing units. The anticipated average daily water demand is 64,800 gallons per day. The Chatham County Public Works Department was contacted about the project. At the current time, it appears that there is sufficient water available to serve the project.

The 162 additional housing units would generate approximately 68,000 gallons per day of wastewater on average, according to State guidelines. Fearrington Utilities has adequate treatment capacity to support the project.

3. Access Roads:

The access roads to this property are US 15-501 to Villageway, S.R. 1718.

The roads built in this project will be constructed to NCDOT standards for acceptance into the State system. All connecting roads in the Village are built to NCDOT standards and already are accepted by the State.

4. Storm Water Runoff:

The development of Fearrington has proceeded with many practices that help to manage storm water runoff. Fearrington has developed with many large lots, open space preservation, stream buffers, vegetated swales, and grassed swales for drainage along most of the streets. The above are considered "Best Management Practices" by the North Carolina Division of Water Quality. Fearrington has employed tree preservation practices, particularly within open space areas. Much of Fearrington has heavy landscaping in developed areas. Tree preservation and landscaping act to improve storm water runoff quality and reduce volume.

Continued development of the Village Center would utilize cluster development design principles. The housing units would be tightly grouped or clustered. Where possible, the storm water would be collected and discharged into vegetated swales and/or across natural areas or buffers. Areas of limited disturbance would separate the clusters. Buffers would remain between the housing clusters and larger natural drainage features. Every attempt would be made to pass runoff from the developed areas

through vegetation both landscaped and natural to "filter" the storm water before it reaches the larger streams.

Clustered Land Planning Techniques

The clustered land planning techniques proposed are noted in a recent EPA report that states that clustered development actually is better for water quality than is normal and even large lot subdivision development. That report is attached in the Appendix to this Application. See Appendix E.

#### ENVIRONMENTAL IMPACT ASSESSMENT

The unbuilt Fearrington property is accessible from Villageway, Weathersfield, East Camden and Millcroft. The site is a combination of upland timber (±60%) and grazing land. Woods consist of numerous upland and bottomland trees and other vegetation and are mature for the most part. There has been no commercial or industrial use of the property in the past. The pastures were a part of a dairy farm prior to 1976. Grazing continues today. There are no improvements on the property except a sanitary sewer trunk line.

A tributary of Bush Creek flows through a part of the property. A part of the property (park land) touches Bush Creek buffers. There are associated jurisdictional wetlands. No development is planned in these areas.

The Natural Heritage Program has identified favorable habitat for Carolina Ladle Crayfish in streams within a five-mile radius of Lake Jordan. These have not been specifically identified in these streamways. Similarly the Appalachian Golden Banner was in the database, however the last observation was in 1958, which is not a strong indicator that it will be found in this tract.

The Inventory of the Natural Areas and Wildlife Habitats (June 1992) has not identified this tract as a protected area.

It is the design and construction goals of this plan to minimally impact air, water, wildlife and overall land quality of the Fearrington South tract. The layout design and home design are sensitive to the site and its features. The construction will be phased, thus limiting the disturbed land to only those areas under active construction. Buffer areas are set about the streamways, around the perimeter, and on the steeper hillsides. There will be no new streamway crossings with roadways.

The higher density neighborhoods will be primarily sited in the flatter open land areas. Single-family lots are designed for the steeper areas with the more mature trees. In those areas only tree removal required by NCDOT and that required to site the homes will be made. Cleared and graded land will be stabilized with vegetation and new street trees will be planted where there are no woods. The streamway will be protected by existing and supplemental

vegetative buffers. Lawn and garden care chemicals will be directed through vegetative buffers, and the homes will be sited away from streamways.

Roadways will be built without curb and gutter except in those areas where onstreet parking is required. Principles of low impact development will be employed in the site design.

Stormwater runoff and sediment control will be controlled by approved plan and best management practices. Public water will be used, thus no groundwater depletion is anticipated. Waste water is treated, thus there is no risk of groundwater contamination by septic systems. Impervious surfaces will meet County regulations.