

**CITY OF GAINESVILLE PLANNING DIVISION  
DEVELOPMENT PLAN REVIEW  
SUMMARY OF COMMENTS**

**Petition Number: PZ-09-19**

**Reviewed By: Scott Wright**

**Reviewing Body: Development Review Board**

**Date: May 14<sup>th</sup>, 2009**

**Project Name/Location: Hatchet Creek; Area NE of 39th Avenue, east of NE 15th Street**

**Project Description: Design plat review of an environmental cluster subdivision with 734 residential lots.**

**I. Department Comments**

- |                            |                                   |
|----------------------------|-----------------------------------|
| <b>1. Planning:</b>        | <b>Not Approvable</b>             |
| <b>2. Environmental:</b>   | <b>Approvable with conditions</b> |
| <b>3. Concurrency:</b>     | <b>Approvable with conditions</b> |
| <b>4. Arborist:</b>        | <b>Approvable with conditions</b> |
| <b>5. Public Works:</b>    | <b>Approvable with conditions</b> |
| <b>6. Building:</b>        | <b>Approvable</b>                 |
| <b>7. G.R.U.:</b>          | <b>Approvable with conditions</b> |
| <b>8. Fire:</b>            | <b>Approvable with conditions</b> |
| <b>9. Solid Waste:</b>     | <b>Approvable</b>                 |
| <b>10. HAZMAT:</b>         | <b>Approvable</b>                 |
| <b>11. Public Schools:</b> | <b>Approvable</b>                 |

**III. Overall Recommendation**

**City staff recommends that this petition, PZ-09-19, not be approved.**

#### **IV. Table of Contents**

- **City staff comments**
- **City Attorney's May 6, 2009 memo and exhibits  
(regarding proposed Hatchet Creek subdivision design plat)**
- **City Attorney's Sept. 19, 2007 memo and exhibits  
(regarding proposed Hatchet Creek land use change)**
- **Letter and supporting exhibits from Allan Penska, Chief Executive Officer of  
Gainesville Regional Airport**
- **Consistency Report, prepared by petitioner**
- **Letters from attorneys for petitioner (titled Appendix B), received 3/11/09**
- **Petitioner's response to City environmental review staff comments, received 4/6/09**
- **Additional letters from attorneys for petitioner, received 5/5/09**
- **Design plat sheets**


# SITE PLAN EVALUATION SHEET

## DEVELOPMENT PLAN & SUBDIVISION REVIEW EVALUATION

### CURRENT PLANNING ROOM 158, THOMAS CENTER "B"

### 306 Northeast 6th Avenue 352-334-5023

Petition No. <u>PZ-09-19</u> Review For : <u>Development Review Board</u> Project Description: Design plat for review for an environmental cluster subdivision with 734 residential lots. Location: Area NE of 39th Avenue, east of NE 15th Street	Date Plan Rec'd: <u>5/4/09</u> Review Date: <u>5/11/09</u>	Review Type: <u>Preliminary Final</u> Property Owner: East Gainesville Redevelopment Partners, LLC Project Agent: Eng Denman and Associates, Inc.
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<input type="checkbox"/> Plan meets LDC and Comp Plan requirements and is approvable <input type="checkbox"/> Plan is approvable with revisions recommended by staff <input checked="" type="checkbox"/> Plan does not meet requirements and is not approvable	Comments By:  <hr style="width: 80%; margin: 0 auto;"/> Scott Wright Planner
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### RECOMMENDATIONS/REQUIREMENTS/COMMENTS

1. The site for this proposed subdivision has a residential future land use designation (Single Family Residential) and residential zoning districts (RSF-1 and RSF-4). However, per Section 30-347, the proposed design plat must also comply with applicable standards in Appendix F-Airport Hazard Zoning Regulations in the Land Development Code. The proposed configuration of the Hatchet Creek subdivision includes a large number of residential lots (approximately 450) in an area that is within the established Airport Noise Zone – as depicted on a map within Appendix F. The appendix states that “the Airport Noise Zone is established around the Gainesville Regional Airport to regulate land uses sensitive to sound levels generated by the routine operation of the Airport.” The Airport Noise Zone consists of three subzones that are defined in the code and shown on the map (included as Attachment 1). Within the Airport Noise Zone, residential uses are listed as ‘restricted uses’ and must meet certain criteria. In order for residential uses to be permitted within any subzone of the Airport Noise Zone, the developers “shall verify to the City in writing that proposed buildings will be designed to achieve an outdoor to indoor noise level reduction (NLR) of at least 25 decibels” and the developer must demonstrate that the proposed residential development “is compatible with the Official 14 CFR Part 150 study”. The currently effective Part 150 Study, dated March 1986, indicates that residential uses are incompatible within the Airport Noise Zone. Within this study, there is a section on Land Use and Population Impact, and several tables are included within this section that show residential as a “noncompatible land use” (see Attachment 2). The Noise Compatibility Program that is presented within the Part 150 Study covers initiatives that the airport may employ to minimize the impacts of aircraft noise, and also provides guidance to surrounding jurisdictions regarding land use management controls (at the time that the Part 150 Study was written, much of the area that is within areas affected by aircraft noise was within unincorporated Alachua County). The section of the Part 150 Study that addresses these land use management controls concludes that, “specifically, it is recommended that the County not permit any residential development within the 65 Ldn contour.” It may be assumed that this same recommendation would apply to the City, now that this area has been annexed.

A memorandum has been provided by an expert consultant to the City – Ted Baldwin of Harris Miller Miller & Hanson Inc (see Attachment 3). This memo includes an analysis of Part 150 implementation at the Gainesville Airport, its relationship to the City’s Airport Hazard Zoning Regulations, and opinions and recommendations regarding the proposed design plat. The memo concludes in part that future residents of the proposed

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subdivision will find aircraft operations and noise exposure "to be intrusive and annoying", and that they "are likely to complain to the airport, the City, and the developer." Mr. Baldwin also refers to an Environmental Protection Agency report that identified the "55 dB DNL as the outdoor level of environmental noise requisite to protect public health and welfare." Based upon a review of the current Part 150 Study and the expert analysis provided by Ted Baldwin, staff concludes that a large portion of the proposed design plat is incompatible with the Official 14 Part 150 Study and does not meet the criteria in Appendix F to allow residential uses within the Airport Noise Zones.

A memorandum from the City Attorney, dated May 6, 2009, outlines the legal issues related to the Airport Noise Zone, the Official CFR Part 150 Study, and the affect of these regulations upon the review of a subdivision design plat.

2. Section 30-183(g) outlines the considerations the reviewing board should make when reviewing a design plat. This section states that the board shall determine if the proposed subdivision is in conformity with the Comprehensive Plan and the zoning requirements, meets protection requirements for environmental features, provides adequate access for bicycle, pedestrian, transit, and emergency vehicles, and provides a sufficient overall stormwater management plan. This section also states that particular attention should be given to the arrangement and location of streets and lots at the design plat review stage. The role of the Development Review Board (DRB) is to review the design plat and make a recommendation to the City Commission. The recommendation of the DRB may be to approve the design plat as presented (if it is found to be in compliance), or to require modifications, or to disapprove the design plat.
3. A large portion of the proposed design plat is located within the significant ecological communities overlay district. Section 30-309(i)(1), regarding this district, states the following: "to improve protection of significant ecological communities, single-family residential development may cluster as provided in Section 30-190." In keeping with this recommendation, the petitioner for Hatchet Creek has proposed an environmental cluster subdivision. Therefore, this design plat should clearly reflect the purpose and intent of a cluster subdivision, which is to "encourage better site planning than would normally occur by conventional subdivision procedures" [Section 30-190(a)]. Specifically, the objectives of a cluster subdivision include preserving valuable open spaces, environmentally sensitive areas and tree cover; providing for better utilization of land; and promoting efficiency through design. This means that the development should demonstrate that it effectively protects the environmentally sensitive areas on the site through clustering of the residential areas.
4. Section 30-309(e), regarding the significant ecological communities overlay, states that "a set-aside of no more than ten percent of the total parcel area, in addition to areas required by Code or law for building setbacks from property lines, landscaping, parking, and stormwater surface management, or buffers required for surface waters and wetlands, heritage tree preservation, and utilities, may be required to enable the clustering of development on the parcel away from significant ecological features on the parcel." Approximately 232.0 acres of the proposed subdivision is within this overlay, and so the maximum required set aside is based upon this area. Sheet P0.09 shows the 'proposed upland set aside' in the Hatchet Creek subdivision, and provides a calculation of the total acreage of this set aside (29.46 acres) and the percentage of the set aside within the overlay area (12.0%). These calculations seem to indicate that the maximum upland set-aside that may be required is already provided by this development. However, the map on Sheet P0.09 shows wetland and creek buffers as part of the upland set-aside, and Section 30-309 specifically

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excludes buffers required for surface waters and wetlands from counting toward the set-aside requirement. Therefore, it has not been demonstrated that the maximum upland set-aside is being provided by this development. Section 30-309(e) states that "the exact amount and location of property to be set aside shall be determined by the appropriate reviewing board, city manager or designee on a site specific basis and shall be based on objective criteria that the ecological feature(s) on the parcel require additional protection to remain ecologically viable, or restore ecological function in addition to the intensity, density and design of the proposed development." More specific criteria are listed within Section 30-309(e), and these are addressed in the City's environmental review comments.

5. The proposed design plat shows impacts to 8.41 acres of wetlands (out of a total of 78.17 acres on the site). In order to impact these wetlands, the subdivision has to demonstrate avoidance of wetlands through minimization, and meet the public interest test and other criteria under Section 30-302(e). Prior to approval of a mitigation plan associated with this subdivision, any proposed impacts to wetlands must first be approved by the reviewing board. The details of any proposed mitigation plan will be reviewed at the final plat level.
6. Section 30-190(b) states that cluster subdivisions "may be permitted in any zoning district in which single-family dwellings are allowed." Therefore, the cluster subdivision may only contain those residentially zoned areas of the parcels. Section 30-190(g)(3) states that all wetlands mitigation for a cluster subdivision must occur on site. This means that mitigation for the wetlands that will be impacted by Hatchet Creek must be accounted for within the cluster subdivision and on properties with a residential zoning. This is consistent with the purpose and intent of a cluster subdivision as described above. The petitioner must demonstrate that the current configuration of the design plat will include the areas necessary for mitigation of the impacted wetlands within the plat.
7. Section 30-190(i) outlines the criteria for review of a cluster subdivision. This section makes it clear that the "applicant must present evidence that the proposed cluster subdivision is utilized the land better than a standard subdivision", and that "if the city commission finds that a subdivision will be improved by the reasonable modification of the location, design or configuration of open space, building lots, streets and parking areas, the subdivision will be modified or denied." This section provides the following specific criteria to guide the city in review and modification of the proposed subdivision:

*(1) Individual lots, buildings, streets and parking areas shall be designed and situated to minimize alteration of the natural site features and topography. A minimum of 50 percent of all heritage trees must be protected.*

The layout of the streets and lots in the proposed design plat is organized to preserve the largest wetland on the site, some of the adjacent uplands, several of the other highest quality wetlands, the two regulated creeks on the site, and to provide the required buffers for these preserved features. The reports from the landscape architect for the petitioner and from the City Arborist indicate that there are no heritage trees that should be protected on the site.

*(2) Individual lots, buildings and other structures shall be arranged and situated to relate to surrounding properties and to improve the view from, and the view of, buildings, lots and structures.*

All proposed lots front on local neighborhood streets, and many of the lots will provide views to the adjacent Ironwood Golf Course, common areas, or natural features.

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*(3) Individual lots, buildings, streets and parking areas, and any accessory structures and improvements located in the cluster open space, shall be situated to avoid the adverse affects of shadows, noise and traffic on the residents of the site and to minimize the area devoted to motor vehicles.*

All lots are separated from the adjacent arterial roads of NE 39<sup>th</sup> Avenue and NW 53<sup>rd</sup> Avenue by at least 50 feet, and will be buffered by existing natural vegetation. The only improvements within the cluster open space are the greenway trail system and several dry retention basins.

*(4) Cluster open space shall include any irreplaceable natural features located on the tract such as, but not limited to, stream beds and adjacent banks, wetlands, flood channels, floodplain areas, major tree groupings and individual trees of significant size.*

Sheet P0.07 shows the location of the required minimum 55 acres of cluster open space in the design plat. The final plat shall make it clear that all preserved wetlands, regulated creeks, and buffers will also be included within the cluster open space.

*(5) The usability of cluster open space intended for recreation or public use shall be determined by the size, shape, topographic and location requirements of the particular purpose proposed for the open space. Further, such space intended for recreation or public use shall be easily accessible to trail users including the elderly and handicapped, be integrated to form unbroken trail linkages between uses within the subdivision, and take advantage of opportunities to establish off-site linkages to nearby land uses, bikeways, sidewalks and greenways.*

The usable open space within this subdivision is in the form of a greenway trail system. The trail will be paved and accessible from the street and sidewalk system within the various neighborhoods in the subdivision. Links to the Ironwood Golf Course and adjacent neighborhoods to the west are proposed with the trail system.

*(6) To the extent practical, lands designated for greenways or other forms of public ownership or access in the conservation, open space or recreation element shall be included as cluster open space and dedicated as specified by subsection 30-187(o).*

There are no lands previously designated for public access within the site for this subdivision. However, the petitioner has stated an intention to dedicate some or all of the proposed greenway trail system to the City.

*(7) Diversity and originality in lot layout and individual building design shall be encouraged to achieve the best possible relationship between the development and the land. Garage doors if forward facing must be set back at least 20 feet from the back of sidewalk and shall not be forward of the front façade of the building. Sidewalks must be included on both sides of the street internal to the cluster subdivision.*

The lots within the subdivision are clustered within individual neighborhoods, and the orientation of lots within those neighborhoods is fairly standard. A note regarding the placement of garages in relationship to the front of buildings shall be included on the final plat. Sidewalks are shown on both sides of all streets.

*(8) To the extent practical, cluster open space shall contain designated surface water or upland environmental features.*

All of the existing regulated surface waters on the site will be contained within the cluster open space. Only a small portion of the existing upland environmental features will be preserved with the development, but these areas will also be included in the open space.

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(9) When lots abut wetlands or buffer areas, the property owner shall provide a ten-foot building construction setback from those areas for a construction work area, so that wetlands and buffer areas are not disturbed during any construction process.

A note regarding this required construction setback shall be included on the final plat.

8. Cluster subdivisions allow for individual lot sizes to be reduced where the overall reduction is accounted for with common open space. Specifically, Section 30-190(g)(1) requires that "the minimum amount of land to be designated as cluster open space shall be equivalent to 75 percent of the total amount of area by which each lot was reduced below the minimum lot size required in the zoning district plus any required wetlands, creeks and associated buffer acreage." Information has been submitted with this petition that demonstrates that this requirement has been met and the appropriate amount of cluster open space has been proposed.
9. The Comprehensive Plan stresses the importance of an interconnected street grid and street connections between neighborhoods. Policy 1.2.7 of the Future Land Use Element states that the City should strive to form an interconnected network of neighborhood streets and sidewalks that support multiple types of travel. Policy 2.1.10 of the Transportation Mobility Element specifically states that new development and redevelopment shall promote walking and bicycling by establishing modest, human-scaled dimensions such as small street blocks and pedestrian-scaled streets. The Urban Design Element reiterates the importance of gridded interconnected streets (Policy 1.3.1), small rectangular blocks (Policy 1.3.2), and a street network that makes walking convenient and pleasant (Policy 1.3.4). The proposed design plat depicts a residential subdivision that is separated into thirteen individual residential pods of development which are connected only through the central collector road. Although the possibilities for design of the site are limited by environmental constraints and the configuration of the property, the subdivision should still be designed in a way that provides the best street connectivity. Even within the currently proposed layout of the subdivision, there are multiple opportunities to improve the street connectivity. The potential exists to add street connections between Phase IV and Phase VII, from Road M to Road N within Phases XI and XII, and from Road M in Phase XI to the central collector road. Either a vehicular or bicycle/pedestrian connection should be made from Phase V to the end of the existing road stubout within the Ironwood Golf Course Village. This connection will need to be coordinated with the City, since the intervening property is part of the Ironwood Golf Course. It is difficult to determine the feasibility and practicality of some potential roadway connections, since they may need to cross existing creeks or drainage ditches or impact wetlands on the site.
10. Despite the Comprehensive Plan support for increased street connectivity, neither the Land Development Regulations nor the Street Design Manual includes any connectivity standards, such as a maximum block size or a maximum distance between intersections. Therefore, in order to evaluate a subdivision to determine that it meets the intent of the Comprehensive Plan, staff must refer to other professional standards, such as the *Neighborhood Street Design Guidelines* prepared by the Institute of Transportation Engineers (2003). This guide states that "block lengths should generally not exceed 660 ft. and the perimeter around a block should not exceed 2,000 ft." Recognizing that not all subdivisions follow a gridded street pattern, the guidelines provide that "for a neighborhood street network with a branching configuration, the maximum distance between each residence and the nearest intersection with a major street providing bi-directional access should not exceed 1,500 ft." Within the proposed subdivision layout, there is only one block face which exceeds 660 feet, in the neighborhood that is shown as Phase VI. The perimeter for the block in Phase VI is also the only one that exceeds 2,000 feet. There are some lots within Phase XII that are located more than 1,500 feet from the central collector street, and this is also true for most lots within Phase XIII.

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However, it is recognized that this situation is due largely to the configuration of the site, and to limits on the number of vehicular access points that will be permitted from NW 53<sup>rd</sup> Avenue.

11. Policy 1.2.9 of the Future Land Use Element requires the provision of intermediate pedestrian connections on block faces over 480 feet. There are two neighborhoods within the proposed design plat layout (Phase VI and Phase VIII) where the block face is longer than 480 feet. A pedestrian pathway is shown through the center of the block within Phase VI, but not within Phase VIII. Such a pathway should be shown on the plat.
12. Policy 1.2.5 encourages the creation of short-cuts for pedestrians and bicyclists between neighborhoods and activity centers. Within this subdivision, a greenway trail system has been proposed that spans from the northern to the southern end of the subdivision, primarily running behind the proposed neighborhoods and along the main collector road. The proposed route of this greenway trail system also creates multiple 'short-cuts' for residents of the development – spurs from the main trail provide access into the neighborhoods, by running between the lots and connecting to the neighborhood streets. Each neighborhood, or phase, within the development has at least one direct connection to the greenway trail system. There are some locations where the greenway trail appears to bend in sharp angles, which is not accommodating to bicyclists using the trail system. When the actual paved surface or trail route is shown on the construction drawings and the final plat, these angles should be smoothed out into curves. Additionally, where the trail provides access to streets between lots, it should not run across the lots as easements, but should be located between the lots as common open space.
13. All streets within a subdivision are required to provide street trees [Section 30-261(b)]. Additionally, as designated Gateway Streets, NE 39<sup>th</sup> Avenue and a portion of NE 53<sup>rd</sup> Avenue will also require street trees adjacent to the proposed subdivision [Section 30-262]. The landscape plans provided with this design plat show understory trees, such as crape myrtle, utilized as street trees (shade trees are required per code). Based upon the petitioners' analysis of the airport obstruction regulations, it seems that shade trees of a species that would reach no more than 50' in height may be reasonably proposed for this entire site. In many areas within the development, the airport obstruction regulations would allow trees of larger stature. The petitioner has informed staff that they have requested special permission from the FAA to allow for shade trees to be planted that may exceed the height restrictions. In any case, appropriate shade trees must be added along all streets in order to meet code requirements.
14. Appropriate shade trees should also be provided within the medians of 'Road A'.
15. This design plat proposes 13 separate phases of development. The Land Development Code allows for development (including subdivisions) to be phased through the approval of a master plan. In order for Hatchet Creek to be phased, a master plan should be included with the design plat that provides the timing for construction of all proposed phases within the development and other information that is outlined in Section 30-164. The individual phases (or multiple phases simultaneously) may then be reviewed and approved as final plats. The City does not typically approve phasing schedules that exceed 5 years to completion of a master plan. The phasing plan on Sheet P4.10 shall incorporate a phasing schedule for the development, including "the sequence for each phase, approximate size of the area in each phase, and proposed phasing of construction of public recreation and common open space areas and facilities." The table that is currently shown on Sheet P4.10 only indicates the number of lots within each phase.



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16. Hatchet Creek is a 734-unit subdivision that proposes only two external access points to the development, one from the central collector road (Road A) to NW 39<sup>th</sup> Avenue and one to NW 53<sup>rd</sup> Avenue. The submitted traffic study indicates that this collector road will be constructed starting from NW 39<sup>th</sup> Avenue and is not proposed to connect through to NW 53<sup>rd</sup> Avenue until after 557 units are constructed within the subdivision. Planning staff recommends that this major collector road be constructed through to NW 53<sup>rd</sup> Street after the construction of 318 units within the subdivision. This would allow Phases I-VII to be built prior to establishing the second external roadway connection. By comparison, Alachua County regulations require at least two functional access points for subdivisions that contain 25 or more lots (except where infeasible due to original tract dimensions, topography or existing development patterns). The City does not have a specific requirement for a second roadway connection based upon subdivision size, but it seems reasonable to require completion of the central collector road prior to complete build-out of the subdivision.
17. With the final plat approval for Phase II, the central collector road (Road A) shall be constructed northward to its intersection with the northern entrance road for Phase VI. Also at this time, the complete construction of the road to NW 53<sup>rd</sup> Avenue shall be secured by an appropriate construction bond. The extension of Road A to NW 53<sup>rd</sup> Avenue shall be included as part of the final plat approval for Phase VIII.
18. Since this area is currently outside of the City's Transportation Concurrency Exception Area (TCEA), approval of a master plan will not vest the development for concurrency. Final concurrency certification and reservation of trips will take place during final plat review for individual phases of the development. Each subdivision phase shall be required to apply for and meet concurrency certification requirements with the application for final plat.
19. Since cluster subdivisions are only permitted within residential zoning districts, the portion of tax parcel 08160-001-000 that has an industrial zoning district and tax parcel 08160-001-001 that has a PS zoning district may not be included within the cluster subdivision. The clubhouse area that is shown within the PS zoning should be removed from the proposed design plat – this will be reviewed as a separate development plan. Prior to approval of the final plat, a lot split or minor subdivision must be approved that would separate the I-2 portion of tax parcel 08160-001-000 from the residentially zoned portion of the property.
20. The proposed subdivision is located within the Primary and Secondary Wellfield Protection Zones and is directly across the street from the Murphree Wellfield. Within these wellfield protection zones, "new development and existing development that will intensify, expand, or modify a use directly associated with the storage of hazardous materials" is required to obtain a wellfield protection permit or a wellfield protection special use permit. However, exceptions are provided for uses typically allowed within residential zoning districts. This design plat includes only single-family residential lots, and so a wellfield permit is not necessary at this point in the review process. A wellfield permit will be necessary for the future development of the industrial property.

# ATTACHMENT 1

# 090182

Attachment 3

## AIRPORT RUNWAY NOISE ZONE

Gainesville Regional Airport

### Legend

Decibal Contours  
Depicting Airport Noise

- Subzone A
- Subzone B
- Subzone C

--- Airport Property Line

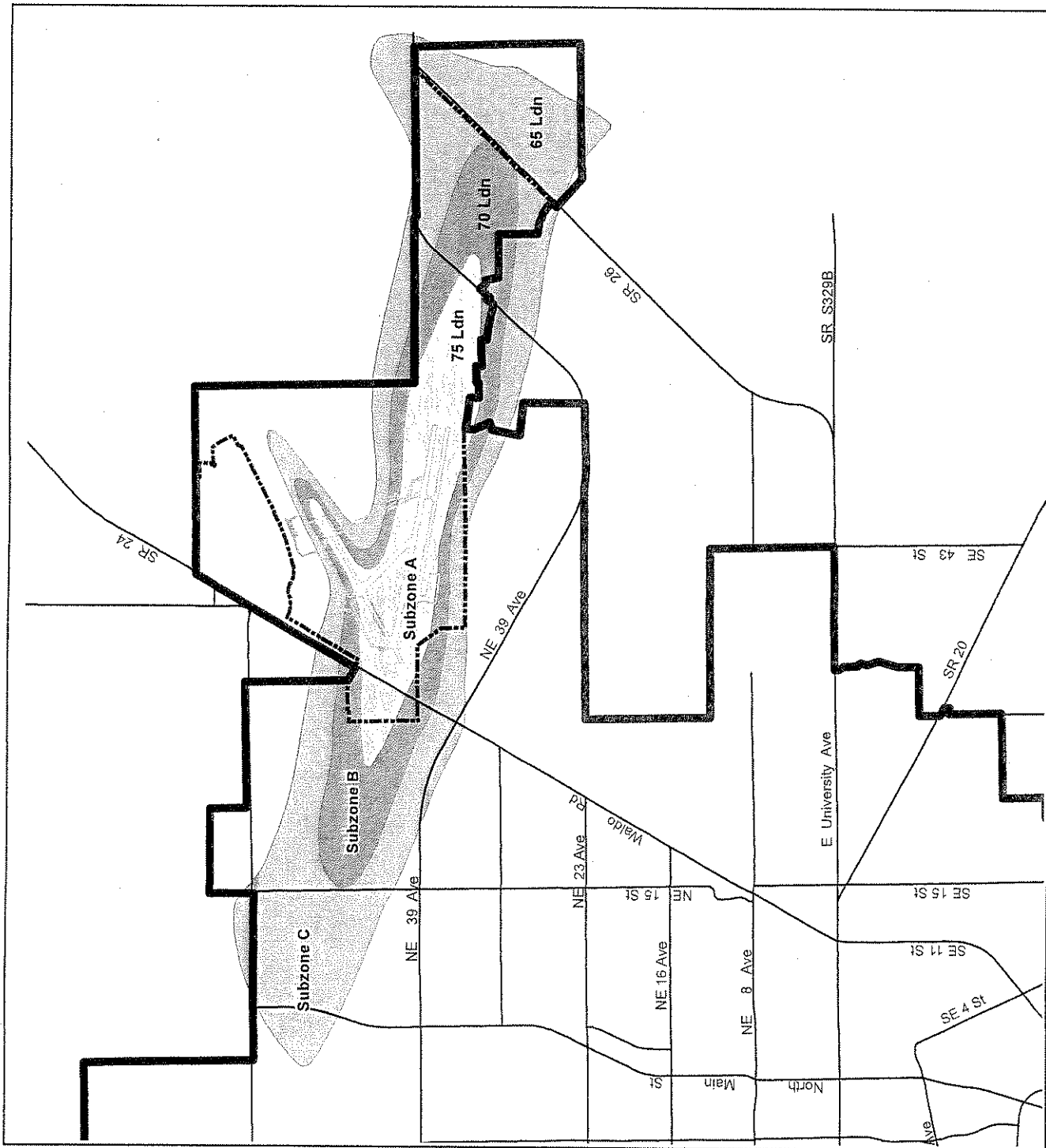
W Gainesville City Limits

Source: City of Gainesville, Land Development Code  
Appendix F, Attachment 3  
File: T:\Projects\Planning\Airport

City of Gainesville\Gainesville, I

Prepared by the  
Dept of Community Development  
April 2007

0.4 0.2 0 0.4 Miles



# ATTACHMENT 2

# 090182

requirements of FAR Part 36, Noise Standards; Aircraft Type and Airworthiness Certification.

## LAND USE AND POPULATION IMPACT

The current (1985) Ldn contours were placed on a background map which illustrates existing land uses and used as a guide to estimating resident population impacted by aircraft noise. This information is presented in Figure 7 and summarized in Table 8 below. Consultation with Alachua County Department of Planning and Development staff yielded average population density per land use.

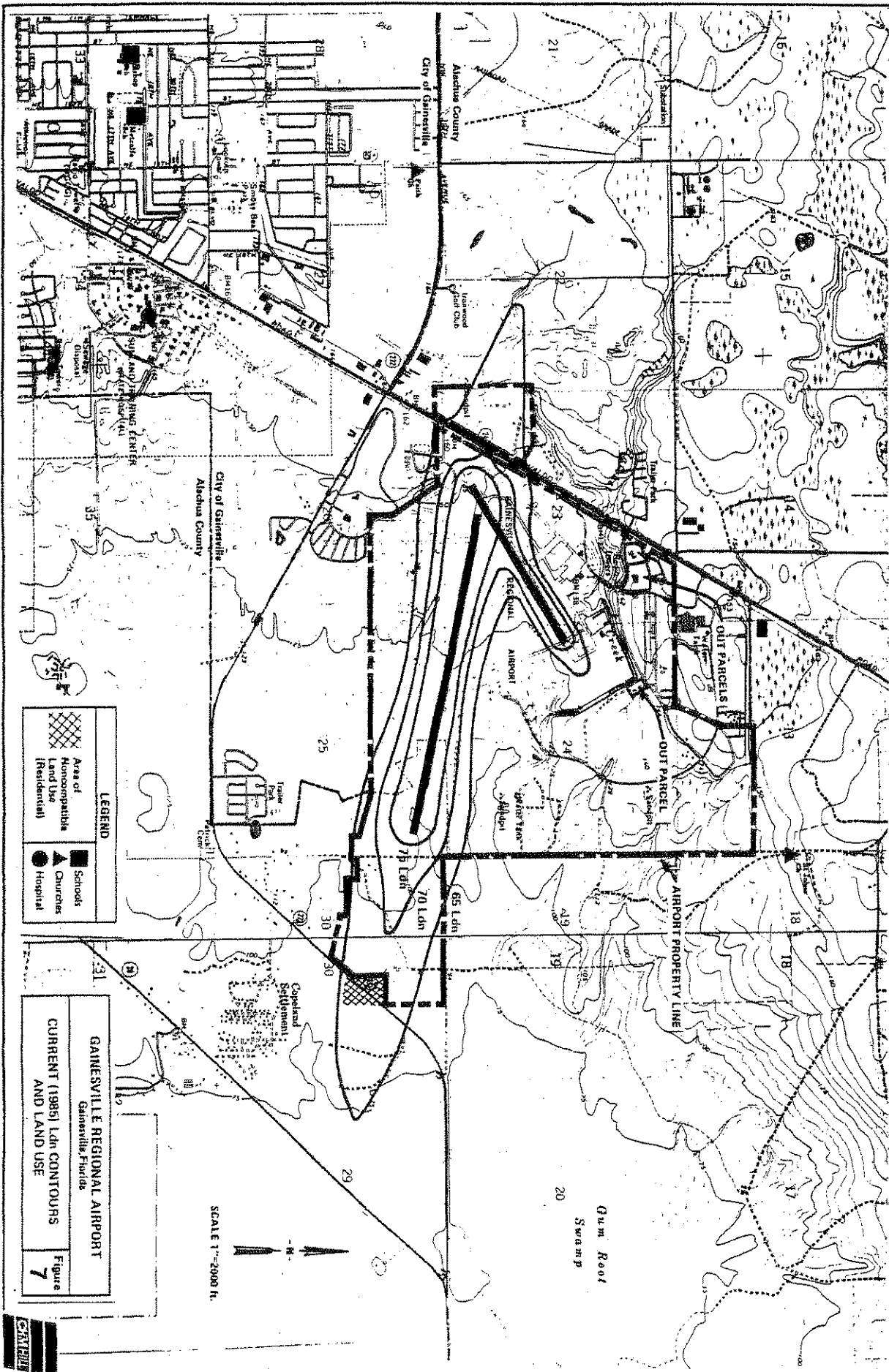
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Table 8  
LAND USE AND POPULATION IMPACT  
CURRENT (1985) CONDITIONS

<u>Noise Impact Area</u>	<u>Noncompatible Land Use (acres)</u>	<u>Resident Population</u>
65-70 Ldn		
Residential	13	30
70-75 Ldn	0	0
75 and Greater Ldn	<u>0</u>	<u>0</u>
Total	13	30

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Note: All noncompatible land uses are located within the jurisdictional boundaries of Alachua County.

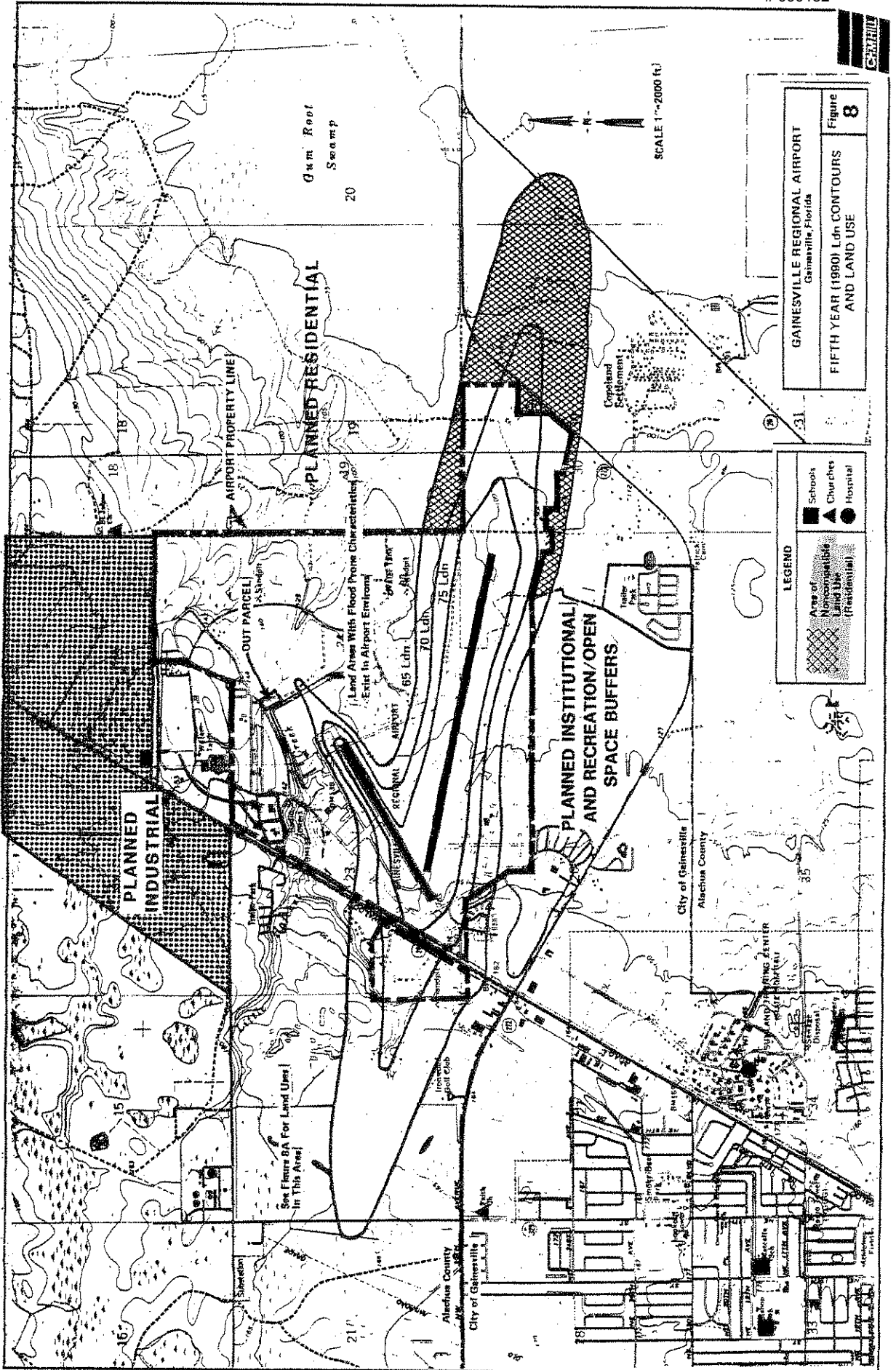


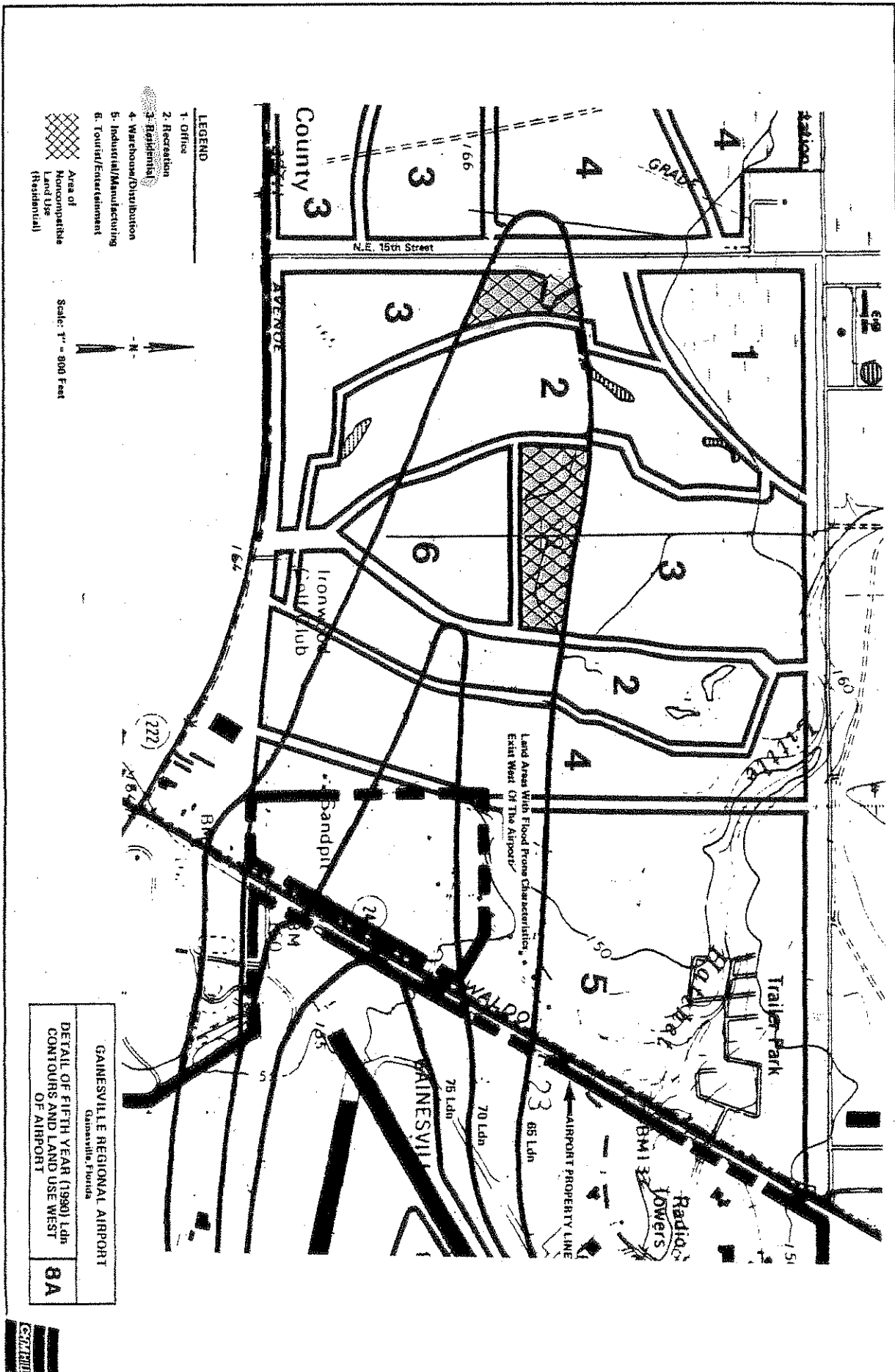
For the fifth-year (1990) situation, land areas beyond the Airport property boundaries and impacted by aircraft noise were placed a background map illustrating future land uses as planned by the City of Gainesville and Alachua County and presented in Figures 8 and 8A. Noncompatible land use areas were measured and resident population densities were suggested by County staff to generate the data presented in Table 9.

Table 9  
LAND USE AND POPULATION IMPACT  
FIFTH-YEAR (1990) CONDITIONS

<u>Noise Impact Area</u>	<u>Noncompatible Land Use (acres)</u>	<u>Resident Population</u>
65-70 Ldn		
Residential	289	470
Industrial/Warehouse	0	0
Tourist/Entertainment (hotel)	0	0
Recreational	<u>0</u>	<u>0</u>
Subtotal	289	470
70-75 Ldn		
Residential	41	120
Industrial/Warehouse	0	0
Recreation	<u>0</u>	<u>0</u>
Subtotal	41	120
75 and Greater Ldn	<u>0</u>	<u>0</u>
Total	330	590

Note (1) All noncompatible land uses are located within the jurisdictional boundaries of Alachua County.  
 (2) A zero (0) in the column headed "Noncompatible Land Use" indicates that although a particular land use is impacted by aircraft noise, the type land use is considered compatible with that noise impact level.





GAINESVILLE REGIONAL AIRPORT  
 Gainesville, Florida  
 DETAIL OF FIFTH YEAR (1990) LdH  
 CONTOURS AND LAND USE WEST  
 OF AIRPORT

8A



Both Tables 8 and 9 indicate the extent of land uses which may be considered normally noncompatible as defined in FAR Part 150 within the resultant Ldn contours and presented in Table 10.

WDR122/017



Table 10  
**LAND USE COMPATIBILITY\* WITH YEARLY DAY-NIGHT AVERAGE SOUND LEVELS**

Land Use	Yearly Day-Night Average Sound Level ( $L_{dn}$ ) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
<i>Residential</i>						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
<i>Public Use</i>						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
<i>Commercial Use</i>						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
<i>Manufacturing And Production</i>						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
<i>Recreational</i>						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

Numbers in parentheses refer to notes.

\* The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

KEY

- SLUCM Standard Land Use Coding Manual.
- Y (Yes) Land Use and related structures compatible without restrictions.
- N (No) Land Use and related structures are not compatible and should be prohibited.
- NLR Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
- 25, 30, or 35 Land used and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

NOTES

- (1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- (2) Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (4) Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (5) Land use compatible provided special sound reinforcement systems are installed.
- (6) Residential buildings require an NLR of 25.
- (7) Residential buildings require an NLR of 30.
- (8) Residential buildings not permitted.

SOURCE: Federal Aviation Regulations Part 150.

# ATTACHMENT 3

# 090182

## HARRIS MILLER MILLER & HANSON INC.

77 South Bedford Street  
Burlington, MA 01803  
T 781.229.0707  
F 781.229.7939  
W www.hmmh.com

### MEMORANDUM

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**To:** Erik Bredfeldt, City of Gainesville, Florida  
**From:** Ted Baldwin  
**Date:** April 6, 2009  
**Subject:** Airport Noise Regulation Background for April 9, 2009 Development Review Board Discussion of Hatchet Creek Development Proposal  
**Reference:** HMMH Project 302950

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#### 1. INTRODUCTION

In response to your request, this memorandum addresses the following three topics to provide noise-related background for the April 9, 2009 Development Review Board discussion of the revised Hatchet Creek development proposal:

- Overview of Federal Aviation Regulation (FAR) Part 150, "Airport Noise Compatibility Planning"<sup>1</sup> and its implementation at Gainesville Regional Airport (GNV).
- Relationship of Part 150 to the City of Gainesville "Airport Hazard Zoning Regulations."
- Opinions regarding "best practices" related to addressing noise impacts in the proposed Hatchet Creek development and the City of Gainesville "Airport Hazard Zoning Regulations."

##### 1.1 Project Understanding

A residential development, named "Hatchet Creek," is proposed adjacent to GNV, in an area generally bounded to the west by NE 15<sup>th</sup> Street, to the south by NE 39<sup>th</sup> Avenue, to the north by NE 53<sup>rd</sup> Avenue, and to the east by the Gainesville city limits and the GNV property line.

The developer originally petitioned the City to approve a Planned Use District for the site, and to rezone the eastern portion of the site from "industrial" ("I-1") and the western portion of the site from "single family" ("RSF-1"), to permit higher density residential development, assisted living facility units, and commercial and office uses. These two areas surround the Ironwood Golf Course, which is zoned "recreational."

I understand the developer has revised the proposal to include only single family residential units in the RSF-1 zoned portion of the site, and no development in the I-1 zoned portion.

A majority of the site, including a majority of the RSF-1 zoned area in which residential units are proposed, falls within "Airport Noise Subzones" "A," "B," or "C," defined by the City's Airport Hazard Zoning Regulations. The three subzones correspond to the following Day-Night Average Sound Level ("DNL" or "Ldn")<sup>2</sup> exposure bands (considering aircraft noise only):<sup>3</sup>

- Subzone A: 75+ decibel (dB) DNL
- Subzone B: 70 - 75 dB DNL
- Subzone C: 65 - 70 dB DNL

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<sup>1</sup> Part 150 is codified under Title 14 of the Code of Federal Regulations, as 14 C.F.R. Part 150.

<sup>2</sup> DNL is a measure of cumulative exposure to noise, normally presented for an entire calendar year in airport noise studies. In simple terms, it is the steady-state noise level over the entire year that would contain the same amount of noise energy as the actual time-varying sound, with one important adjustment: noise occurring at night (10 p.m. - 7 a.m.) is increased by 10 dB. For aircraft noise, this is equivalent to assuming that every nighttime aircraft operation occurs ten times.

<sup>3</sup> I understand the City adopted the noise subzone regulations at least partly in response to recommendations from a Part 150 study that the Gainesville-Alachua County Regional Airport Authority adopted for GNV in March 1986. See Section 2.3.

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Section II.C.2.e of the Airport Hazard Zoning regulations permits residential development in Subzones A, B, or C when two conditions are met:

1. The developer verifies to the City in writing that the structures are designed to achieve an outdoor-to-indoor noise level reduction (NLR) of at least 25 dB or executes and records an avigation easement to the Gainesville-Alachua County Regional Airport Authority.
2. The proposed development is compatible with the "Official 14 CFR Part 150 study."

## 2. OVERVIEW OF PART 150 AND ITS IMPLEMENTATION AT GNV

Part 150 sets standards for airport proprietors to follow in documenting noise exposure in the airport environs and establishing programs to minimize noise-related land use incompatibility. A formal Part 150 submission to the Federal Aviation Administration (FAA) includes documentation for two principal elements: (1) Noise Exposure Map (NEM) and (2) Noise Compatibility Program (NCP).

Part 150 is a voluntary process; however, over 250 airports have participated in the Part 150 program. There are many reasons for airports to participate, including, but not limited to:

- Conducting a comprehensive noise study under a recognized process, to demonstrate and pursue the airport's interest in addressing noise issues in an affirmative, community-oriented manner.
- Developing noise abatement measures in a manner that is more likely to obtain cooperation from the FAA and other aviation interests.
- Developing compatible land use measures in a manner that is more likely to obtain cooperation from local land use control jurisdictions.
- Taking advantage of potential access to FAA funding for conducting the study and, with FAA approval of proposed NCP measures, for their implementation, which can be expensive, particularly when land use measures such as acquisition or sound insulation are involved.

### 2.1 Noise Exposure Maps

The NEM documentation describes the airport layout and operation, aircraft noise exposure, land uses in the airport environs and the resulting noise / land use compatibility situation. The NEM must address *at least* two time frames: (1) the year of submission and (2) a forecast year at least five years following the year of submission. Airports often include a third, long-term time frame, to provide a more extended basis for planning. Part 150 requires more than simple "maps" to provide all the necessary information. In addition to graphics, requirements include extensive tabulated information and text discussion, including description of data collection and analysis, and of consultation with all interested stakeholders, in particular local land use control jurisdictions.

A critical component of a NEM submission to the FAA is identification on the map graphics of noncompatible land uses within the 65 decibel (dB) DNL noise contour using a table of land use compatibility guidelines presented in Part 150,<sup>4</sup> or a "substitute" table if the local land use control jurisdictions have adopted one.

### 2.2 Noise Compatibility Program

The NCP is essentially a list of the actions the airport proprietor proposes to undertake to minimize existing and future noise/land use incompatibilities. NCP documentation must recount the development of the program, including a description of all measures considered, the reasons that individual measures were accepted or rejected, how measures will be implemented and funded, and the predicted effectiveness of individual measures and the overall program. Typically, an NCP includes noise abatement measures designed to reduce aircraft noise or shift it away from noncompatible areas, and compatible land use measures designed to prevent new noncompatible development and mitigate existing noncompatible uses.

<sup>4</sup> Part 150 §A150.101(b), Table I, "Land Use Compatibility with Yearly Day-Night Average Sound Levels."

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Official FAA acceptance of the Part 150 submission and approval of the NCP does not eliminate requirements for formal environmental assessment of any proposed actions pursuant to requirements of the National Environmental Policy Act (NEPA). However, acceptance of the submission is a prerequisite to application for FAA funding of implementation actions.

**2.3 Part 150 Implementation at GNV**

The Gainesville Alachua County Regional Airport Authority (the "Airport Authority") completed a Part 150 study for GNV in March 1986.<sup>5</sup> The Authority is in the process of conducting a Part 150 update. Until the update is complete and accepted by the FAA, the 1986 study remains the "official study." The noise contour figures from the 1986 study designate residential land within the 65 dB DNL contours as "noncompatible."

Chapter IV ("Noise Compatibility Program") of the 1986 report includes a section titled "Evaluation of Surrounding Jurisdiction Options," which notes that "Alachua County is the sole surrounding jurisdiction which controls land use and development in the area surrounding the Airport which is adversely impacted by aircraft noise."<sup>6,7</sup> That section observes that current County zoning regulations and policies permit residential development within the 65-70 dB DNL contour interval with "an additional 5 dB of [exterior-to-interior sound level] attenuation above that resulting [from] normal construction practices with open windows for ventilation."<sup>8</sup> It notes that most local building codes and practices in the Gainesville region provide this additional attenuation because they require air conditioning systems for ventilation. The section observes that the County regulations and policies permit residential use within the 70-75 dB DNL contour interval, with 30 dB of attenuation.

The section comments about these regulations and policies as follows:

The noise attenuation requirements may serve residential land owners well during times of the year when continued use of air condition or heating systems are in operation and doors and windows are closed. However, the Gainesville regional climate is also conducive to open window conditions during several months of the year. Further these policies have no influence on reducing noise impacts outside of the building residence, where family and other activities occur which can require that noise levels be the same as those found in an interior environment. Moreover, because for the most part these land areas are (1) not yet developed for residential land use, (2) located in areas with are not planned to be provided with infrastructure development (water, sewer, etc.) and (3) have terrain features (wetlands) which limit future development, it would be prudent to adopt a more controlled land use management program. Specifically, it is recommended that the County not permit any residential use within the 65 Ldn contour.<sup>9</sup>

The Airport Authority is in the process of conducting a Part 150 update study at GNV. The City of Gainesville has a representative on the Part 150 Study's "Technical Advisory Committee." The Authority has submitted a revised NEM to the FAA for review.<sup>10</sup> To my knowledge, the FAA is still in the process of reviewing the document for acceptability. The NEM includes noise contours for calendar years 2007, 2012, and 2027, all of which are smaller than the contours for 1985 and 1990 presented in the 1986 NEM. The overall reduction is approximately 10 decibels.<sup>11</sup> The updated 65

<sup>5</sup> "Gainesville Regional Airport FAR Part 150 Study," prepared by CH2MHill, March 1986.

<sup>6</sup> Ibid., p. IV-11.

<sup>7</sup> In 1986, the area west of the airport encompassing the proposed Hatchet Creek development, was outside the Gainesville municipal boundary.

<sup>8</sup> Ibid., p. IV-11.

<sup>9</sup> Ibid., p. IV-12.

<sup>10</sup> "GNV Part 150 Noise Study, Phase 1 – Noise Exposure Maps," RS&H and ESA Airports, October 2008.

<sup>11</sup> A ten-decibel reduction represents a 90% reduction in noise energy. While the reduction from 1985 and 1990 is due to complex changes in activity levels and the types of aircraft operating at the airport, it is equivalent to

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dB DNL contours only leave the airport property immediately west of the airport. This off-airport area extends into the Hatchet Creek development site, but only over the industrial zoned area.<sup>12</sup>

Table 7.2 of the revised NEM<sup>13</sup> presents a modified version of the Part 150 land use compatibility table discussed in Section 2.1 which proposes more stringent guidelines, including indicating that residential use be considered noncompatible with aircraft noise exposure as low as 60 dB DNL<sup>14</sup> and discouraged as low as 55 dB DNL.<sup>15</sup> I understand that the Airport Authority has recommended that the City adopt these revised guidelines and apply them using the 2027 NEM contours. A majority of the Hatchet Creek development site, including a majority of the RSF-1 zoned area in which residential units are proposed, falls within the 2027 55 dB DNL contour; on the order of half the area in which residential units are proposed falls within the 2027 60 dB DNL contour.

**3. RELATIONSHIP OF PART 150 TO THE AIRPORT HAZARD ZONING REGULATIONS**

Part 150 relates to the Gainesville Airport Hazard Zoning Regulations in at least two ways:

- *The GNV NEM contours provide the basis for establishing the Airport Noise Zones.*

Section C.1. ("Airport Noise Zone and Regulations") states in part:

The boundary of any Airport Noise Zone shall be amended as necessary to reflect any changes in the documentation of forecast day/night average sound levels on which said zone is based. Notwithstanding other provisions of this section, should the Gainesville Regional Airport amend its official 14 CFR Part 150 study, the boundaries of the Airport Noise Zones shall be modified to comply with the amended official noise study.

Until the FAA determines that the updated NEM submission is in compliance with applicable requirements of Part 150, the 1986 NEM contours continue to be the basis for defining the Airport Noise Zone boundaries. When the FAA finds the updated NEM submission in compliance, then it is the appropriate basis for establishing the noise zone boundaries and, as I recommend in Section 4, the City should update the Airport Hazard Zoning Regulations accordingly.

- *Section II.C.2.e. "Restricted Uses and Criteria" states that residential use is one of several land uses that are permitted within the noise overlay zone "only if the proposed development is compatible with the "Official 14 CFR Part 150 study."*

As discussed in Section 2.3 of this memorandum, Chapter IV the 1986 NCP "recommended that the County not permit any residential use within the 65 Ldn contour." Until the FAA has found the updated NEM in compliance and approved the updated NCP, residential development within the 65 dB DNL contours from the 1986 report is not "compatible" with at least this recommendation of the "official 14 CFR Part 150 Study."

Furthermore, as discussed in Section 2.3, the 2008 Part 150 NEM update recommends that residential use be considered noncompatible with aircraft noise as low as 60 dB DNL and discouraged as low as 55 dB DNL. Since these updated NEM contours cover major portions of the RSF-1 zoned area in which residential units are proposed in the Hatchet Creek site, that residential development would not be "compatible" with this recommendation of the Part 150 update when it becomes the "official" study.

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cutting operations at the airport by a factor of 10. It should be noted that some of the reduction might be the result of improvements in the noise model and its embedded aircraft noise and performance data.

<sup>12</sup> The 2027 contour extends slightly further to the west over the eastern golf course area.

<sup>13</sup> Ibid., p.7-7.

<sup>14</sup> With the exception of transient lodging with 25 dB of sound attenuation.

<sup>15</sup> Where the local jurisdiction determines residential use must be allowed, the suggested guidelines recommend noise attenuation minimums. Transient lodgings are considered outright compatible and mobile homes outright noncompatible.

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## 4. OPINIONS AND RECOMMENDATIONS

In earlier assistance to the City related to the Hatchet Creek development proposal, I noted “[t]he City has adopted airport noise zone regulations that reflect relatively high levels of sensitivity to airport noise compatibility in general, and to recommendations from the GNV Part 150.” Unfortunately for residents neighboring most airports in the U.S., few land use control jurisdictions have adopted such comprehensive and responsive airport zoning regulations. This section recommends actions the City could take to maintain this positive situation.

### 4.1 Opinion Regarding Land Compatibility Best Practices

As discussed in Section 2.1, Part 150 includes a table of land use compatibility guidelines. Several observations about that table are relevant to defining current best practices.

First, the table includes an important footnote, which states:



The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local land use authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.<sup>16</sup>

As discussed in preceding sections of this memorandum, both the original GNV Part 150 and the update that is underway recommend compatible land use criteria that are more stringent than the FAA guidelines, to take into account local climate, building types, life styles, citizen expectations, etc. As this Part 150 footnote makes clear, it is the City’s responsibility to take these local conditions into account when adopting and applying land use controls; Part 150 guidelines reflect “national average” conditions that differ significantly from those in Florida, where the climate leads to citizen life styles focused on, and expectations related to, greater outdoor access and activity. Sound attenuation is not as affective in Gainesville as it is in colder climates, where outdoor interests are more limited.

Second, it should be noted that prior to FAA adoption of Part 150 in 1981, the Environmental Protection Agency published a report (in response to Congressional direction in the “Noise Control Act of 1972”) titled “Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.” The report identified 55 dB DNL as the outdoor “level of environmental noise requisite to protect public health and welfare” with a five decibel margin of safety. Even without the margin of safety, the EPA concluded that 60 dB DNL was the upper limit of acceptable exposure “outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places where quiet is a basis for use.”<sup>17</sup> The 65 dB DNL compatibility guideline in Part 150, which defines the outer limit of the Gainesville’s existing airport noise zones, is five decibels higher than the EPA protective level without a margin of safety and 10 dB higher than the EPA recommendation with that margin.

Third, it should be noted that FAA guidelines were based on technological and economic feasibility at that time they were adopted. Aircraft were generally much noisier in the 1980s when FAA published the Part 150 guidelines and when GNV conducted its first Part 150 study. Since that time, aircraft technology improvements have significantly reduced aircraft source noise levels and noise contours at most airports (as observed at GNV between 1986 and 2008), despite increases in activity.<sup>18</sup> These

<sup>16</sup> Ibid., Appendix A, Table 1, “Land Use Compatibility Planning with Yearly Day-Night Average Sound Levels.”

<sup>17</sup> U.S. Environmental Protection Agency, “Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety,” Washington, D.C., March 1974, Table 1, p.3.

<sup>18</sup> Federal regulations have forced manufacturers to implement the noise-reducing improvements and forced aircraft operators to purchase the quieter aircraft, accelerating the rate at which the benefits have been achieved.

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improvements have significantly reduced the cost of noise mitigation, such as sound insulation or acquisition. As a result, it is technologically and economically feasible to adopt compatibility criteria that provide a higher level of protection to residents and are consistent with the 1974 EPA recommendations for protective levels.

**4.2 Recommended Amendment to the Airport Noise Zone Regulations**

When the FAA finds the 2008 GNV NEM in compliance with Part 150, I recommend the City amend the Airport Noise Zone Regulations to make them more stringent than the current version, including:

- Prohibit any new residential development within the 65 dB DNL contour.
- Prohibit any new residential development within the 60-65 dB DNL contour interval, with the exception of case-by-case approval of development on isolated lots within largely developed neighborhoods; i.e., "infill" development. Require any new construction that is permitted to provide a minimum of 25 dB of exterior-to-interior noise level reduction and require the property owner to provide Airport Authority with a permanent noise and avigation easement.
- Require any new residential development within the 55-60 dB DNL contour to provide a minimum of 25 dB of exterior-to-interior noise level reduction.
- Base the noise zone definition on the 2027 Noise Exposure Map.

This action would be consistent with evolving "best practices" in the aircraft noise compatibility. As a relevant example, the City of Naples and Collier County, Florida are the local entities that regulate land use in the environs of Naples Municipal Airport. These two jurisdictions have formally adopted land use compatibility criteria that reflect locally determined needs and values, to prevent residential development within the 65 dB DNL contour and to approve residential use within the 60 to 65 dB DNL contour interval only on a case-by-case basis with conditions such as additional sound attenuation and avigation easements. For all intents and purposes, these regulations represent controls that are five decibels more stringent than the current Gainesville regulations.

**4.3 Opinion and Recommendation Regarding the Hatchet Creek Development Proposal**

The City should consider these best practices and likely revisions to the Airport Noise Zone regulations in reviewing the Hatchet Creek proposal, to ensure the project is consistent with current local and industry conditions, and not with 23-year-old information, guidelines, and practices.

In my opinion, many future Hatchet Creek residents will find the aircraft operations and noise exposure that the 2008 NEM forecasts over the site to be intrusive and annoying. They are likely to complain to the airport, the City, and the developer. I do not believe the 25 dB noise level reduction option for obtaining development approval will adequately address this situation, because that requirement is not significantly higher than the level of sound attenuation typically provided by current building construction techniques in Florida, and because the treatment will provide little or no benefit when windows are open and no benefit for outdoor activities.

In my opinion, the avigation easement option for obtaining conditional approval for development in the Airport Noise Zones is preferable to the 25 dB NLR option, because it ensures that potential residents are notified in advance of closing on the property; at a minimum, the title search will reveal the easement, although it would be preferable if the purchaser was notified no later than during the purchase and sale process. Advance notice will permit potential residents purchasers to make informed purchasing decisions and avoid being surprised by the presence of aircraft overflights and noise after moving in to the development. Informed purchasers are less likely to find the overflights and noise annoying.

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Since 1980, the estimated U.S. population living within 65 dB DNL has dropped from approximately 7.2 million to approximately 0.5 million

# SITE PLAN EVALUATION SHEET


ENVIRONMENTAL REVIEW 334-5070 M.S. 58

Petition No. <u>PZ-09-00019</u>	Review Date: <u>5/11/09</u>	Review Type:
Review For: <u>Development Review Board</u>	Plan Reviewed: <u>5/11/2009</u>	<u>Design Plat</u>
Description, Agent & Location: <u>Hatchet Creek</u>		Project Planner:
Eng. <u>Denman &amp; Associates, Inc.</u>	<u>2100 NE 39<sup>th</sup> Avenue</u>	<u>Scott Wright</u>

**APPROVED**  
(as submitted)

**APPROVED**  
(subject to below)

**DISAPPROVED**

<input checked="" type="checkbox"/> Wetlands or wetland buffers must be shown. <input checked="" type="checkbox"/> Creeks or creek setbacks must be shown. <input type="checkbox"/> Lakes or lake setbacks must be shown. <input checked="" type="checkbox"/> Significant ecological communities on site. <input type="checkbox"/> Archaeological/historical sites on site.	Comments By:  <u>Mark Garland</u> Environmental Coordinator
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## NOTES/RECOMMENDATIONS:

Below I repeat my comments from March 26 and update them.

1. *Protection of the water quality of Newnan's Lake.* The applicant has designed an intense development that proposes 744 small lots, 52 acres of impervious surface, 50 acres of dry stormwater basins, and the removal of 9.3 acres of wetlands. The applicant notes that all city and state requirements for stormwater treatment will be met by the proposed stormwater system, but this does not guarantee that the development will not affect the water quality of Newnan's Lake. A particular concern in this area is that the deeper ditches on site may be contributing phosphorus at times to Newnan's Lake. The Environmental Features Inventory, required by 30-309(d) for this site, must include a plan for monitoring nutrients like phosphorus in surface water entering and exiting the site. The applicant has proposed a plan that is generally acceptable. This monitoring must begin at least one year before any development of the site. I would appreciate the opportunity to discuss the details of the water-quality monitoring plan.

**Update:** The design now proposes 734 lots with preservation of Wetland 23 (0.33 acres) and a smaller impact to Wetland 52-C (so that the impact area is now less than 0.59 acres). The total area of direct wetland impact is now less than 9 acres.

2. *Protection of the Murphree Wellfield.* The development must comply with the requirements of Section 30-305, Gainesville Code. To further protect the wellfield, the applicant should consider reducing the intensity of development in the primary wellfield protection zone.

**Update:** The applicant is now proposing ten fewer lots in the primary wellfield protection zone.

3. *Minimization of impacts to the habitats of listed species.* The applicant's Environmental Features Inventory reports one active and three inactive gopher tortoise (*Gopherus polyphemus*) burrows within the site and proposes relocation of these animals "to an on-site Conservation Area." The applicant should specify where this Conservation Area is proposed. There are also hooded pitcherplants (*Sarracenia minor*) in three wetlands on site that are not proposed to be impacted. The Environmental Features Policy Manual requires that "at least 50% of



# SITE PLAN EVALUATION SHEET

## ENVIRONMENTAL REVIEW 334-5070 M.S. 58

listed species must be preserved *in situ*," which may be difficult for mobile animals. The applicant should clarify whether the proposed relocation of gopher tortoises complies with this requirement.

In my opinion, listed plant species on this site are most likely to be found in wetlands; the upland flatwoods community may be a suitable habitat for listed plants after frequent growing-season burns, but is not now. Listed animals that require large areas of undeveloped land, such as Florida black bears, may use this site; they will most likely not use the site after development.

**Update:** The applicant should specify where listed species are to be preserved *in situ*.

4. *Minimization of impacts to the highest-quality uplands on the site.* The site is covered with pine flatwoods and cypress-gum swamps and has been drained by large ditches since the construction of the Ironwood Golf Course in the 1960's. The applicant's Environmental Features Inventory rightly points out that the natural communities have been altered by drainage and fire suppression, and that the highest-quality upland in the area may be the remnant sandhill in the Industrial area east of this site. The Environmental Features Inventory Policy Manual requires delineation and protection of all rare, vulnerable, or exemplary natural communities on-site. The uplands on-site qualify as Mesic Flatwoods in the Florida Natural Areas Inventory classification and do not qualify as rare, vulnerable, or exemplary natural communities. (The City's Environmental Resource Report of January 2001 did consider this area to be an exemplary mosaic of communities.) They are valuable within the City of Gainesville for their size and their protection of the remaining wetlands and the surface waters on site. Although they have suffered from drainage and from lack of fire, they have not been bedded and treated with herbicide as have the commercial forests to the north. With proper management, they can become good examples of North Florida pine flatwoods.

The applicant has not provided post-construction acreages of natural communities as the Environmental Features Inventory Policy Manual requires, but the plan appears to remove essentially all of the natural uplands between the arms of the golf course. The site should be re-examined to determine whether any of these uplands proposed for removal are worthy of preservation as wildlife corridors or buffers connecting wetlands.

**Update:** The applicant should supply post-construction acreages of natural communities. In my opinion, an area from the preserved wetlands in the east-central portion of the site (wetlands 24, 39, 40, and 41) north to the main branch of Little Hatchet Creek should be considered as a set-aside to preserve some of the higher-quality flatwoods on site, to preserve connections between wetlands and uplands, and to leave a wildlife corridor along the creek. It would also protect more of the primary wellfield protection zone. This would require an upland set-aside of more than 10% of the property in the Significant Ecological Communities overlay district, however. It cannot be required.

5. *Minimization of impacts to the wetlands on site.* Section 30-302.1(d), Gainesville Code, states in part: "Avoidance of loss of wetland function and wetland habitat is of the highest priority. The owner shall avoid loss of wetland function and wetland habitat by implementing practicable design alternatives to minimize adverse impacts to wetlands."

The applicant's design plat includes only post-construction wetland boundaries and buffers, making it difficult to determine how many lots are within existing (pre-construction) wetlands and buffers. Fortunately, the landscape plan overlays the site plan on the survey, allowing an estimate of the number of proposed lots within existing wetland boundaries and buffers.

# SITE PLAN EVALUATION SHEET

## ENVIRONMENTAL REVIEW 334-5070 M.S. 58

From this landscape plan, it appears that 170 (23%) out of the 744 lots are completely or partially within existing wetlands or the 50-foot wetland buffer. See the attached listing of lot numbers.

Please explain how placing 23% of the lots in wetlands or buffers “avoids or minimizes adverse impacts to wetlands” on the site. It is inappropriate to discuss mitigation for impacts to wetlands until such impacts are avoided or minimized to the extent practicable.

Section 30-190(g)(3) requires that all wetland mitigation must be on-site, not partially in the Industrial area as the present Environmental Features Inventory proposes.

Moreover, the Environmental Features Inventory Policy Manual requires a plan for protection of the rare, vulnerable, or exemplary natural communities on site. The wetlands least affected by drainage on this site qualify as Dome Swamps, vulnerable according to the Policy Manual. Examples of such less-drained wetlands are Wetlands 52C and 23 in the northern part of the site. The current plan proposes impact to Wetland 52C and the complete removal of Wetland 23. The plat should be redesigned to protect these and other higher-quality wetlands and their buffers.

**Update:** The applicant has redesigned the plat to avoid direct impact to Wetland 23 and to reduce impacts to Wetland 52-C, two of the higher-quality wetlands on site. However, 149 of the 734 lots (20%) are still proposed to be placed completely or partially within wetlands or wetland buffers. The applicant needs to demonstrate why impacts cannot be reduced further.

6. *Protection of connectivity of wetlands and uplands throughout the site.* As mentioned above under point 4, the current plan proposes the near-complete removal of the upland natural communities between the arms of the golf course, eliminating whatever connectivity of wetlands and uplands still exists on the site. The applicant should consider preserving broad areas of uplands that connect otherwise isolated wetlands. Section 30-309(e) can require a set-aside of up to 10% of the total parcel area “based on objective criteria that ecological feature(s) on the parcel require additional protection to remain ecologically viable, or to restore ecological function.” The applicant’s Environmental Features Inventory is fairly thorough, but does not give enough information to determine where a set-aside or set-asides should be located. I look forward to working with the applicant to determine whether a set-aside should be required, and, if so, where.

**Update:** The applicant has provided figures showing that over 10% of the parcel in the Significant Ecological Communities overlay district is set aside under the current plan. This meets the requirement of Section 30-309. Many of these upland fragments are small and isolated. In my opinion, the applicant should consider setting aside a larger, more contiguous area of uplands around wetlands. See “update” to comments regarding point 4 above.

**Quality of Wetlands Proposed to be Partly or Completely Removed  
Hatchet Creek Design Plat (PZ-09-19)**

Mark A. Garland  
Environmental Coordinator  
City of Gainesville  
April 8, 2009

The Hatchet Creek design plat submitted on March 11, 2009, proposes completely removing 17 wetlands and removing parts of 6 more wetlands. In all the plat proposes removing 9.28 acres of wetlands. Section 30-302.1(d) of the City's land development regulations states in part that "Avoidance of loss of wetland function and wetland habitat is of the highest priority. The owner shall avoid loss of wetland function and wetland habitat by implementing practicable design alternatives to minimize adverse impacts to wetlands." The applicant claims that these wetlands are of such low ecological value that the design plat does not have to avoid or minimize impacts to them, as also allowed by section 30-302.1(d). This part of the section states that "Avoidance through practicable design modifications is not required when the ecological value of the function provided by the area of wetland is low and the proposed mitigation will provide greater long-term ecological value than the area of wetland to be affected."

I have attempted to determine whether the wetlands proposed for impact are of such low ecological value that the plat does not need to avoid or minimize impacts to them. I reviewed the applicant's description of each wetland in the Environmental Features Inventory report and visited most of the wetlands myself.

The City's land development regulations do not define "low ecological value." Since the City's regulations appear to have been adopted from the Water Management District regulations, I assessed each wetland according to the five criteria in the St. Johns River Water Management District's Management and Storage of Surface Waters Applicant's Handbook, section 12.2.2.3:

- (a) condition - this factor addresses whether the wetland or other surface water is in a high quality state or has been the subject of past alterations in hydrology, water quality, or vegetative composition.
- (b) hydrologic connection - this factor addresses the nature and degree of off-site connection which may provide benefits to off-site water resources through detrital export, base flow maintenance, water quality enhancement or the provision of nursery habitat.
- (c) uniqueness - this factor addresses the relative rarity of the wetland or other surface water and its floral and faunal components in relation to the surrounding regional landscape.
- (d) location - this factor addresses the location of the wetland or other surface water in relation to its surroundings. In making this assessment, the District will consult reference materials including the Florida Natural Areas Inventory, Comprehensive Plans, and maps created by governmental agencies identifying land with high ecological values.
- (e) fish and wildlife utilization - this factor addresses use of the wetland or other surface water for resting, feeding, breeding, nesting or denning by fish and wildlife, particularly those which are listed species.

In my opinion, factors (c), uniqueness, and (d), location, are similar for all the wetlands on the Hatchet Creek site, and I did not assess these for each wetland.

*Uniqueness:* Nearly all these wetlands were originally forested, probably with a mix of pond cypress (*Taxodium ascendens*) and black gum (*Nyssa sylvatica* var. *biflora*). These are not unique in this area, though it is unusual to have such a large area of flatwoods and cypress-gum swamps within the city limits of Gainesville. Some of the smallest wetlands may be remains of wet prairies or depression marshes within the flatwoods, but again these are not unique.

*Location:* These wetlands have a high value because of their location. Alachua County designated this area as part of its Buck Bay Flatwoods Strategic Ecosystem. The 1996 KBN/Golder report summarizes this area as follows (emphasis added): “This is a large site of commercial pine flatwoods forest and associated wetlands directly north of Gainesville. *It is a major headwaters area*, rather like a miniature Green Swamp, supporting the following creek systems to varying degrees: Rocky Creek, Montechoa Creek, Rhuda Branch, Hatchet Creek, Little Hatchet Creek, and a bit of Hogtown Creek. ... *Wetlands occupy large areas and provide a lot of surface water storage and wildlife habitat.*”

In its 2001 Environmental Resource Report, the City of Gainesville’s Nature Operations Division rated this area as one of three sites, in and around the city, of “outstanding environmental quality” and called it one of the “‘gems’ of Gainesville’s remaining natural areas.”

The Alachua County Environmental Protection Department’s June 2007 report on Gainesville Creeks says “Some areas in the upper watershed [of Little Hatchet Creek] have been ditched and drained to reduce flooding, but retain some natural vegetation in the form of forested wetlands. These areas are important because, although ditched and drained, they contain relatively little impervious area.”

In my opinion, the value of the location of these wetlands by itself excludes any from being considered of such low ecological value that they need not be avoided. Nevertheless, the wetlands proposed for impact do vary in quality, and in the table below I rate each of the wetlands on the remaining three factors: (a) condition, (b) hydrologic connection, and (c) fish and wildlife utilization. For each factor, I give a value of “low,” “medium,” or “high.” The wetlands are arranged from north to south.

Wetland Number	(a) Condition	(b) Hydrologic Connection	(c) Fish and Wildlife Utilization
52-C	high (for site)	low	medium
20	medium	medium	medium
17	medium	low	medium
23	high (for site)	low	medium
71	medium	low	medium
5151	low	low	low
8700	low	low	low
8741	low	low	low
25	medium	medium (ditch)	medium
700	low	low	low
36	low	medium (ditch)	low
38/38B	medium	medium (ditch)	medium
37	low	medium (ditch)	low
35	medium	medium (ditch)	medium
800	low	low	low
57	low	low	low
27-A	low	medium	low
34	low	low	low
54-A	low	low	low
53	medium	low	medium
29	medium	medium (ditch)	medium
29A	medium	medium (ditch)	medium
32	low	medium (ditch)	low

**Hatchet Creek design plat  
(PZ-09-00019)  
Lots completely or partly  
within wetlands or 50-foot wetland buffers**

Mark A. Garland  
Environmental Coordinator  
City of Gainesville  
May 11, 2009


<i>Phase</i>	<i>Lots</i>	<i>Number</i>
I	none	
II	1-3, 14-23	14
III	none	
IV	8-12	5
V	12-18, 23, 24, 32-46	14
VI	8-12, 32-45, 55, 56, 67-73, 78-83, 94-104	45
VII	none	
VIII	43-65, 80-84	21
IX	1-7, 27-31, 36-40	18
<b>X</b>	<b>none</b>	
XI	1-3, 29, 30, 31-34, 39-49, 53-56	24
<b>XII</b>	<b>none</b>	
XIII	1-3, 48-52	8
TOTAL		149

Percentage: 149/734 = 20.3%

**Boldface:** reduced from original plan.

**CONCURRENCY REVIEW  
PLANNING DIVISION - (352) 334-5022**

Sheet 1 of 1

<b>Petition</b>	<u>PZ-09-19 DB</u>	<b>Date Received</b>	<u>3/11/09</u>	<input type="checkbox"/> Preliminary
<input checked="" type="checkbox"/> DRB	<input type="checkbox"/> PB	<input type="checkbox"/> Other	<b>Review Date</b>	<input type="checkbox"/> Final
<b>Project Name</b>	<u>Hatchet Creek Subdivision</u>			<input type="checkbox"/> Amendment
<b>Location</b>	<u>2000 Block of NE 39<sup>th</sup> Ave.</u>			<input type="checkbox"/> Special Use
<b>Agent/Applicant Name</b>	<u>Eng. Denman</u>			<input type="checkbox"/> Planned Dev.
<b>Reviewed by</b>	<u>Onelia Lazzari</u>			<input checked="" type="checkbox"/> Design Plat Concept

Approvable (as submitted)     
 Approvable (subject to below)     
 Insufficient Information

PD Concept (Comments only)     
 Concept (Comments only)

**RECOMMENDATIONS/REQUIREMENTS/COMMENTS**


1. At the final plat stage, an application for a Certificate of Final Concurrency is required.
2. If there are transportation concurrency or school concurrency problems at the final plat stage of any phases of this subdivision, the developer shall be required to sign a Proportionate Fair-Share Agreement for mitigation of impacts. The developer should be aware that all concurrency (including transportation and school concurrency) is subject to change during the future years. This development will take many years and phases to be completed. Concurrency reservations are at the final plat stage and no concurrency reservation beyond that which is provided by the Land Development Code and final development order is assured.
3. The primary road (as shown by the developer) going through to NW 53<sup>rd</sup> Avenue occurs later in the phasing of the development than is acceptable for good transportation planning and distribution of trips. Scott Wright has proposed an alternative point of phasing that includes bonding assurances to ensure that the road is actually built through at this site.

# SITE PLAN EVALUATION SHEET

## Urban Forestry Inspector 393-8171 – Sta. 27-Third Review

Petition: PZ-09-00019                      Review date: 5/6/09 Review For: Technical Review Committee Agent: Eng, Denman & Associates for <b>Hatchet Creek</b> <b>Subdivision</b> located at 2100 NE 39th Avenue.	Review: Design Plat Planner: Scott
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APPROVED     APPROVED     DISAPPROVED  
 (as submitted)                      (with conditions)

<input type="checkbox"/> Tree Survey Required <input type="checkbox"/> Landscape Plan Required <input type="checkbox"/> Irrigation system required <input checked="" type="checkbox"/> Attention to conditions (revisions/recommendations)	Comments by:  Earline Luhman Urban Forestry Inspector
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### *Revised Comments*

#### **List of Trees by Dr. Ed Gilman book Trees for Urban and Suburban Landscape**

*Trees that will grow 30-50 feet tall*

Replace the small trees to these trees that are recommended for the height and growth habits.

1. Betula nigra-River Birch
2. Bucida buceras-Black Olive
3. Gledidtsia trianthos var. "Imperial"-Thornless Honeylocust
4. Gordonia lasianthus-Loblolly Bay
5. Ilex opaca-American Holly
6. Ilex x attenuate- 'East Palatka'-East Palatka Holly
7. Ilex x attenuate 'Savannah'-Savannah Holly
8. Juniperus silicicola-Southern Red Cedar
9. Magnolia grandiflora 'Bracken's Brown Beauty'- Bracken's Brown Beauty'  
Southern Magnolia
10. Magnolia virginiana-Sweetbay Magnolia
11. Nyssa sylvatica-Black Tupelo
12. Ostrya virginiana-American Hophornbeam
13. Pinus glabra-Spruce Pine
14. Quercus acutissima-Sawtooth Oak
15. Quercus lyrata-Overcup Oak
16. Sassafras albidum-Sassafras
17. Styrax obassis-Fragrant Snowbell
18. Ulmus rassifolia-Cedar Elm
19. Ulmus pavifolia-Chinese Elm
20. Ulmus parvifolia 'Drake Elm'-Drake Elm



**Tree List**

- Include the trees listed above for the street trees on both sides of the roadway and basin requirements.

**Medians in Proposed Street**

- Please indicate shade trees in the medians in the center of the new proposed street within the subdivision.
- A suggestion is to propose shade trees on 30' centers throughout these areas.

**Retention Plantings**

- Indicate the trees with dots/circles in the basins, shrubs, and groundcovers on the Design Plat to ensure the requirements are met for code compliance.

**Sheet LS-1**

- The contact information for inspections is Nature Operations 352-393-8171.

Impact on the Urban Forest will be determined at a later date.

# SITE PLAN EVALUATION SHEET

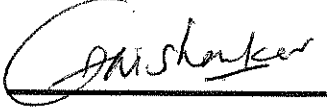
PUBLIC WORKS DEPARTMENT 334-5070 M.S. 58

Petition No. <u>PZ-09-00019</u>	Review Date: <u>2/24/09</u>	Review Type:
Review For: <u>Technical Review Committee</u>	Plan Reviewed: <u>2/26/2009</u>	<u>Design Plat</u>
Description, Agent & Location: <u>Hatchett Creek Subdivision, Eng Denman, 2100 NE 39<sup>th</sup> Avenue</u>	Project Planner:	<u>Scott Wright</u>

**APPROVED**  
(as submitted)

**APPROVED**  
(subject to below)

**DISAPPROVED**

<input checked="" type="checkbox"/> Alachua County Public Works approval required. <input checked="" type="checkbox"/> F.D.O.T. approval required. <input checked="" type="checkbox"/> SJRWMD permit is required. <input checked="" type="checkbox"/> 100 Yr. critical duration analysis required. <input checked="" type="checkbox"/> Treatment volume must be recovered within 72 Hrs. (F.S. of 2) <input type="checkbox"/> Approved for Concurrency.	Comments By:  Sundaram (Jai) Jaishankar E.I. Development Review Engineer
--	--

## REVISIONS / RECOMMENDATIONS:

### General:

All design elements will need to conform to the City of Gainesville Design Manual for Subdivisions and Site Plans. Points of emphasis are noted below.

### Flood Plain Requirements:

1. Verify and address any flood plain impacts (per revised FEMA Flood Plain Maps and as referenced in City Ordinance Number 30 – 290 & 30 – 291) as indicated below:
  - A) Where there is Subdivision Roadway and Lot encroachment into FEMA Zone A with no community determined base flood information available the following will apply:
    - i) The developer must establish a base flood elevation for Zone A areas and other flood prone areas on the site using detailed engineering analysis.
    - ii) For new homes the lowest floor elevation must be specified on the construction plans to be a minimum of one foot above the base flood elevation of all flood prone areas on the site including the storm water ponds.
    - iii) At least one route of access to each residential lot shall be provided by means of a road raised to or above the 100-year flood level.
    - iv) A plan must be established to provide compensation for lost floodplain storage if fill is proposed within the 100-year flood plain.
    - V) If placement of fill results in alteration of the FEMA floodplain, a FEMA CLOMR-F must be issued before the final plat can be approved. Once the fill is placed then a LOMR-F must be issued before building permits for individual homes can be issued.

# SITE PLAN EVALUATION SHEET

PUBLIC WORKS DEPARTMENT 334-5070 M.S. 58

- B) If the engineer's study indicates that the FEMA floodplain is incorrect a FEMA LOMR to remove affected lots from the FEMA Zone A must be issued before a final plat can be approved.
2. From the plans it appears that several lots are impacted by flood plain issues. What is currently being done in order to make these lots developable? A note will be required in the plat stating that "certain portions of this plat lie within the designated 100-year flood plain."
3. Permit requirements:
- FDOT Driveway Connection Permit will be required for the NW 39<sup>th</sup> Avenue roadway connection.
  - County Driveway Permit will be required for the NW 53<sup>rd</sup> Avenue roadway connection
  - SJRWMD Permit.
4. Some of my comments are at this point are better deferred to (and more applicable) the next submittal or construction plan phase where more detail/ specifics is provided in the plans and the layout has been defined..

# SITE PLAN EVALUATION SHEET


PUBLIC WORKS DEPARTMENT 334-5070 M.S. 58

Petition No. <u>PZ-09-19</u>	Review Date: <u>2/25/09</u>	Review Type:
Review For: <u>Technical Review Committee</u>	Plan Reviewed: <u>2/26/2009</u>	<u>Design Plat</u>
Description, Agent & Location: <u>Hatchet Creek, Eng Denman, Near Ironwood golf course</u>		Project Planner: <u>Scott Wright</u>

**APPROVED**  
(as submitted)

**APPROVED**  
(subject to below)

**DISAPPROVED**

<input type="checkbox"/> Alachua County Public Works approval required. <input type="checkbox"/> F.D.O.T. approval required. <input checked="" type="checkbox"/> SJRWMD permit is required. <input checked="" type="checkbox"/> 100 Yr. critical duration analysis required. <input checked="" type="checkbox"/> Treatment volume must be recovered within 72 Hrs. (F.S. of 2) <input type="checkbox"/> Approved for Concurrency.	Comments By:  <hr/> David Sowell P.E. Development Review Engineer
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\*\*\* Construction plans are required to sufficiently review the drainage. The following comments are recommendations/requirements for the construction plan submittal package based on the design plat submittal package.

Requirements for construction plans:

1. The curve number of 45 given to much of the pre-development project does not appear to correspond with any TR-55 designations for the B/D soils which dominate the project area and its vicinity. Justification or recalculation of this curve number is required for the construction plan submittal.
2. Please provide pre and post development ICPR network diagram maps showing locations of the basin/node/link elements as well as the contours used to determine the input data.
3. Please provide varying boundary stages for the pre and post development ICPR model that show peak stages and times that correspond in a manner that is consistent with each storm event. The boundary stages can be adjusted for each storm event through the individual routing simulations.
4. Please extend the northern creek pre development ICPR model for the length of the proposed development and incorporate the creek stage into the post development PONDS models as a tailwater condition if the creek stage influences the adjacent discharge structures. Additionally, account for the flows from the northern offsite creek that enters the project downstream from Pre Basins 11 and 12.
5. Please account for the offsite flow from the areas south of 39<sup>th</sup> Ave that enters the western portion of the southern ditch.

# SITE PLAN EVALUATION SHEET

## BUILDING INSPECTION DEPARTMENT REVIEW

Petition No. PZ-09-19	Review Date: <u>3-20-09</u>	Review Type: <u>Preliminary Final</u>
Review For : <u>Plan Board</u>	Plan Reviewed: <u>3-20-09</u>	
Description, Agent & Location: <u>Hatchet Creek</u> <u>2100 NE 39th Ave</u>		Project Planner: <u>Scott Wright</u>

**APPROVABLE**     **APPROVABLE**     **DISAPPROVED**     **CONCEPT**  
SUBJECT TO COMMENTS

This site plan has been reviewed for compliance with Chapter 5 of the Standard Building Code & for accessible routes of the Florida Accessibility Code for Building Construction. Complete code compliance plan review will be performed at Building Permitting.	Comments By: <u>Buddy McGhin</u> Buddy McGhin Plans Examiner PX0000545
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REVISIONS / RECOMMENDATIONS:

**3/20/09**

1) No comments, looks ok.



**DEVELOPMENT REVIEW EVALUATION  
GAINESVILLE REGIONAL UTILITIES**

Ellen Underwood, New Development Coordinator  
PO Box 147117, Gainesville, FL 32614  
Voice (352) 393-1644 - Fax (352) 334-3480

Mar 25, 2009

3 Petition PZ-09-19 SUB

Eng, Denman, and Associates, Inc., agent for East Gainesville Development Partners LLC. (Hatchet Creek) Design plat review for an environmental cluster subdivision. Zoned: RSF-1 (3.5 du/ac single family), RSF-4 (8 du/ac single family), I-2 (general industrial), and PS (public services and operations). Located at 2100 NE 39th Ave, adjacent to the Ironwood Golf Course. (Planner Scott Wright)

- Conceptional Comments
- Conditions/Comments
- Approved as submitted
- Insufficient information to approve

- New Services** The impact this development will have on our water distribution and sewer collection capacities will be evaluated. Capacity is available on a first-come, first-served basis, and water distribution system and wastewater collection system upgrades might be required for the developer to pay for prior to connection. Utility space allocations will need to be approved before final plat approval.
- Water** This site is located within the primary & secondary wellfield district and will be reviewed for compliance with Section 30-203 of the Land Development Code. Please add notes to the plan cover sheet that are attached.
- Sanitary**
- Sewer**
- Electric**
- Gas**
- Real Estate**

## Underwood, F. Ellen

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**From:** Ingram, Russell D  
**Sent:** Tuesday, March 03, 2009 3:57 PM  
**To:** Wright, Scott A.  
**Cc:** Herget, Ron G; Underwood, F. Ellen; Hafer, Rae A  
**Subject:** PZ-09-19 (SUB) Hatchet Creek DRI wellfield protection notes

Scott,

This project meets the requirements of Sec. 30-202 of the COG Code for exemption from the Wellfield Protection Permit - please have the developer add the following notes to the plan cover sheet:

1. Development shall comply with City of Gainesville and Alachua County Well-field Protection Codes
2. No private wells or septic tanks allowed within the Primary Well-field Protection Zone
3. No deep excavation allowed within the Primary Well-field Protection Zone
4. Herbicides, pesticides, and fertilizers shall not be applied within 500 feet of the well-heads

Thanks,

Russ Ingram, P.E.  
GRU (Gainesville Regional Utilities)  
Phone: (352) 393-1641  
Cell: (352) 363-0400

To access the GRU W/WW/RCW Design Standards, please click the following link:

<http://www.gru.com/WWWStandards/>





City of Gainesville  
Solid Waste Division  
Plan review

Date 2-18-09

Project Number; P2-09-19

Project Name; Hatchet Creek Subdivision

Reviewed by; Paul F. Alcantar  Steve Joplin

Comments

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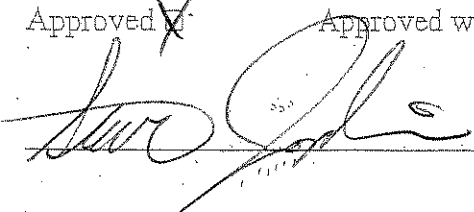
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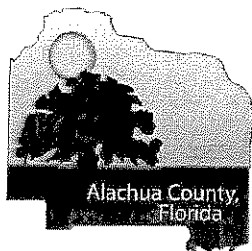
Approved

Approved with conditions

Disapproved



Date 2-18-09



# Alachua County Environmental Protection Department

Chris Bird, *Director*

February 2, 2009

Lawrence Calderon  
City of Gainesville Community Development Department - Current Planning Division  
306 NE 6th Ave.  
Gainesville, FL 32601

**Re: TRC Review – February 2009 agenda**  
**Please circulate the following comments to appropriate planning staff**


The following comments are based on a limited review of the environmental impacts of the proposed developments. This review is confined to an evaluation of the project's ability to comply with the requirements of the Hazardous Materials Management Code (HMMC), Chapter 353, Alachua County Code.

**Petition PZ-09-00019 - Hatchet Creek.** ACEPD has no hazardous materials concerns associated with proposed development. What is the proposed plan for managing the wastewater when the pool is drained for maintenance?

**Petition PZ-09-00006 – Dollar General.** ACEPD has no hazardous materials concerns associated with proposed development.

**Petition PZ-08-00124 – Fire Station No. 8.** Please describe in detail how the proposed onsite vehicle and equipment washing activities will comply with the requirements of the Alachua County Water Quality Code. Installation of the proposed backup generator system must be approved by ACEPD prior to obtaining building permits.

Let me know if you need anything else,

  
Agustin Olmos, P.E.  
Water Resources Supervisor

City of Gainesville  
Solid Waste Division  
Plan review

Date 2-18-09

Project Number; P2-09-19

Project Name; Hatchet Creek Subdivision

Reviewed by; Paul F. Alcantar  Steve Joplin

Comments

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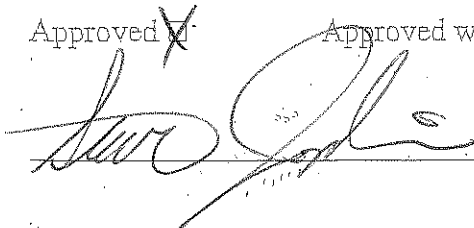
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Approved

Approved with conditions

Disapproved



Date 2-18-09



# Alachua County Environmental Protection Department

Chris Bird, Director

February 2, 2009

Lawrence Calderon  
City of Gainesville Community Development Department - Current Planning Division  
306 NE 6th Ave.  
Gainesville, FL 32601

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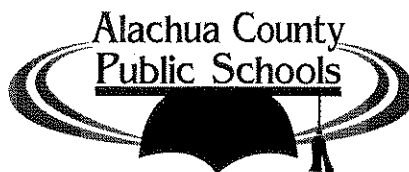
Let me know if you need anything else,

A handwritten signature in black ink, appearing to read "Agustin Olmos".

Agustin Olmos, P.E.  
Water Resources Supervisor

**BOARD MEMBERS**

Virginia S. Childs  
F. Wesley Eubank  
Tina Pinkoson  
Eileen F. Roy  
Barbara Sharpe



Kirby-Smith Administration Center  
620 East University Avenue  
Gainesville, Florida 32601-5498  
www.sbac.edu  
(352) 955-7300  
Fax (352) 955-6700  
Suncom 625-7300  
Suncom Fax 625-6700

**SUPERINTENDENT OF SCHOOLS**

W. Daniel Boyd, Jr., Ed.D.

April 3, 2009

Mr. Dean Mimms  
Chief of Comprehensive Planning  
City of Gainesville  
PO Box 490, Station 11  
Gainesville, Florida 32602-0490

RE: **Hatchet Creek, an Environmental Cluster Subdivision.** Review of Design Plat for 744 Single Family Residential Units on 427.98 acres (290.43 residential acres). Tax Parcels 08160-100-000, 08160-200-000, 08160-400-001, 08160-100-001, 08160-400-000, and 08197-600-000

Mr. Mimms:

Per our discussions with the City of Gainesville and the additional information received, we have completed an updated School Capacity Review for the above referenced project. The review was conducted in accordance with the City of Gainesville Public School Facilities Element as follows:

**POLICY PSFE 1.1.2: Coordinating School Capacity with Growth**

City of Gainesville shall coordinate land use decisions rezonings with the SBAC's Long Range Facilities Plans over the 5-year, 10-year and 20-year periods.

**POLICY PSFE 1.1.3: Geographic Basis for School Capacity Planning.**

For purposes of coordinating land use decisions with school capacity planning, the School Concurrency Service Areas (SCSAs) that are established for high, middle and elementary schools as part of the Interlocal Agreement for Public School Facility Planning shall be used for school capacity planning. The relationship of high, middle and elementary capacity and students anticipated to be generated as a result of land use decisions shall be assessed in terms of its impact (1) on the school system as a whole and (2) on the applicable SCSA(s). For purposes of this planning assessment, existing or planned capacity in adjacent SCSAs shall not be considered.

**POLICY PSFE 1.1.5: SBAC Report to City**

The SBAC shall report its findings and recommendations regarding the land use decision to the City. If the SBAC determines that capacity is insufficient to support the proposed land use decision, the SBAC shall include its recommendations to remedy the capacity deficiency including estimated cost and financial feasibility. The SBAC shall forward the Report to all municipalities within the County.

**POLICY PSFE 1.1.6 City to Consider SBAC Report**

The City shall consider and review the SBAC's comments and findings regarding the availability of school capacity in the evaluation of land use decisions.

**This review does not constitute a "concurrency determination" and may not be construed to relieve the development of such review at the final plat or final site plan stages as required by state statutes and by the City of Gainesville Comprehensive Plan. It is intended to provide an assessment of the relationship between the project proposed and school capacity – both existing and planned.**

The Hatchet Creek Project is projected to provide 744 single family dwelling units at buildout. Table 1 shows the estimated student enrollment based on adopted "student generation multipliers".

**Table 1: Hatchet Creek – Projected Student Generation at Buildout**

	Elementary	Middle	High	Total
Single Family	744			
Multiplier	0.153	0.130	0.142	0.425
Students	114	97	106	317
Multi Family	0			
Multiplier	.084	.068	.060	0.212
Students	0	0	0	0
Total Students	114	97	106	317

**Elementary Schools.** The Hatchet Creek Project is situated in the East Gainesville Concurrency Service Area. The East Gainesville Concurrency Service Area currently contains five elementary schools with a combined capacity of 2,938 seats. The current enrollment is 2,077 students representing a 70.7% utilization compared to an adopted LOS standard of 100%. This utilization rate is projected to increase to 73.9% in five years and to 81.1% in ten years.

No new capacity is planned for the East Gainesville Concurrency Service Area during the five, ten and twenty year planning periods. The adjoining Northwest Gainesville Concurrency Service Area is projected for the addition of an elementary school during the ten year planning period.

Student generation estimates for the Hatchet Creek Project indicate that 114 elementary seats would be required at buildout. Capacity and level of service projections indicate that this demand can be reasonably accommodated during the five, ten and twenty year planning period.

East Gainesville Concurrency Service Area currently has the lowest utilization rate among the elementary CSA's within Alachua County. Residential development in this area has the potential for better utilizing existing elementary school capacity.

**Middle Schools.** The Hatchet Creek Project is situated in the Bishop Concurrency Service Area. The Bishop Concurrency Service Area contains one middle school (Bishop) with a capacity of 1,140 seats. The current enrollment is 825 students representing a 72.4% utilization compared to an adopted LOS standard of 100%. This utilization rate is projected to decline to 66.5% in five years and to be 67.7% in ten years.

No new capacity is planned for the Bishop Concurrency Service Area during the five, ten and twenty year planning periods. The addition of approximately 500 middle school seats is projected for the twenty year period predominantly in the western areas of the county.

Student generation estimates for the Hatchet Creek Project indicate that 97 middle seats would be required at buildout. Capacity and level of service projections indicate that this demand can be reasonably accommodated during the five, ten and twenty year planning period.

Residential development in this area has the potential for better utilizing existing middle school capacity.

**High Schools.** The Hatchet Creek Project is situated in the northwest portion of the Eastside Concurrency Service Area. The Eastside Concurrency Service Area currently has a capacity of 2,195 seats. The current enrollment is 1,756 students representing a 82.5% utilization compared to an adopted LOS standard of 100%. This utilization rate is projected to decrease to 73.4% in five years and to be 74.2% in ten years.

No new capacity is planned for the Eastside Concurrency Service Area during the five, ten and twenty year planning periods. One new high school is projected for the twenty year planning period to be located in the western portion of the County.

Student generation estimates for the Hatchet Creek Project indicate that 106 high seats would be required at buildout. Capacity and level of service projections indicate that this demand can be reasonably accommodated during the five, ten and twenty year planning period.

Residential development in this area has the potential for better utilizing existing high school capacity.

**Summary Conclusion.** Students generated by the Hatchet Creek project at the elementary, middle and high school levels can be reasonably accommodated for the five, ten and twenty year planning periods and is consistent with the Public School Facilities Element. From a school capacity perspective, residential development within the City of Gainesville is generally desirable because of its potential to utilize existing capacity.

This evaluation is based on best projections and upon the 2008-09 Five Year District Facilities Plan adopted by the School Board of Alachua County. The Hatchet Creek project is subject to concurrency review and determination at the final plat (single family) and the availability of school capacity at the time of such review.

If you have any questions, please contact me.

Regards,

Terry L. Tougaw  
Director of Community Planning

CC: Gene Boles  
Ed Gable