



Z-10-09-005

**City of Greensboro Planning Department  
Zoning Staff Report and Plan Amendment Evaluation**

**Zoning Commission Hearing Date: December 13, 2010**

**GENERAL INFORMATION**

<b>APPLICANT</b>	Guilford County Board of Education for Atlas NC I SPE, LLC
<b>HEARING TYPE</b>	Rezoning
<b>REQUEST</b>	<b>CD-R-5</b> (Conditional District-Residential Single Family) to <b>CD-PI</b> (Conditional District-Public and Institutional)
<b>CONDITIONS</b>	1. Uses: Limited to educational facilities.
<b>LOCATION</b>	North of <b>Stewart Mill Road</b> , south of <b>Millstream Road</b> , east of <b>AT&amp;T Drive</b> and west of <b>Creek Road</b> .
<b>PARCEL ID NUMBER(S)</b>	Multiple
<b>PUBLIC NOTIFICATION</b>	The notification area for this public hearing was 600 feet (Chapter 30-4-1.4 of the Land Development Ordinance requires notification of the owner of that parcel of land and the owners of all parcels of land adjoining and contiguous to that parcel of land as shown on the County tax listing). <b>17</b> notices were mailed to those property owners in the mailing area.
<b>TRACT SIZE</b>	~44.60 Acres
<b>TOPOGRAPHY</b>	Undulating
<b>VEGETATION</b>	Natural vegetation

**SITE DATA**

<b>Existing Use</b>	Undeveloped	
	<b>Adjacent Zoning</b>	<b>Adjacent Land Uses</b>
N	County CU-PD-M (Conditional Use-Planned Unit Development-Mixed)	Interstate 85/41 and Millstream Road
E	County CU-RS-9 (Conditional Use-Residential Single Family) and County CU-LI (Conditional Use-Light Industry)	Undeveloped
W	BP (Business Park) and	Corporate offices
S	County AG (Agricultural)	Undeveloped

**Zoning History**

<b>Case #</b>	<b>Date</b>	<b>Request Summary</b>
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This property has been zoned **CD-R-5** (Conditional District-Residential Single Family) since July 1, 2010. Prior to the implementation of the Land Development Ordinance (LDO), it was zoned CD-RS-9 (Conditional District-Residential Single Family)

**ZONING DISTRICT STANDARDS**

**District Summary \***

Zoning District Designation:	Existing <b>(CD-R-5)</b>	Requested <b>(CD-PI)</b>
Max. Density:	5 dwelling units per acre	N/A
Typical Uses	Primarily intended to accommodate low-density single-family detached residential development. The overall gross density in R-5 will typically be 5.0 units per acre or less	Primarily intended to accommodate mid- and large-sized public, quasi-public, and institutional uses which have a substantial land use impact or traffic generation potential. It is not intended for smaller public and institutional uses customarily found within residential areas.

\*These regulations may not reflect the actual requirements for all situations; see the City of Greensboro Zoning Code for actual regulations for site requirements for this zoning district.

**SPECIAL INFORMATION**

**Overlay District Ordinance/Historic Preservation**

**Environmental/Soils**

Water Supply Watershed	Lake MacIntosh Watersupply Watershed, site drains to Little Alamance Creek
Floodplains	Onsite. A Floodplain Development Permit is required for ANY disturbance within the Floodplain
Streams	Perennial stream onsite, If High Density Development is proposed a 100ft stream buffer is required. If Low Density development is proposed a 50ft stream buffer is required. FEMA non-encroachment areas are also required, see FEMA flood map for requirements
Other:	High Density Development (>24% impervious) requires a BMP, Low Density (<24% imp.) requires a scoresheet. Site must meet current watershed requirements

**Utilities**

Potable Water	N/A
Waste Water	N/A

**Airport Noise Cone**

The subject property is not located in the Airport Noise Cone.

**Landscaping Requirements**

Millstream Rd.; Street Yard – minimum width 10’; 2 canopy trees per 100’, 17 shrubs per 100’

East property line; Type B Yard – average width 25’; 3 canopy trees per 100’, 5 understory trees per 100’, 25 shrubs per 100’

West property line at Millstream Rd; Type B Yard – average width 25’; 3 canopy trees per 100’, 5 understory trees per 100’, 25 shrubs per 100’, balance of West property line; NA

North property line; NA

Parking Lot; 1 canopy tree per every 12 spaces

**Tree Preservation Requirements**

**Acreage**

**Requirements**

44.6 ac.      10% of lot size

**Transportation**

Street Classification:      Stewart Mill Road – Local Street, Mount Hope Church Road = Major Thoroughfare.

Site Access:                      All access must be designed to NCDOT and City of Greensboro standards.

Traffic Counts:                  No ADT’s available.

Trip Generation:                24 Hour = 1,059, AM Peak Hour = 692, PM Peak Hour = 278.

Sidewalks:                        Sidewalks are a requirement of the Development Ordinance. 5’ sidewalk with a 5’ grass strip is required along both sides of thoroughfares. 5’ sidewalk with a 3’ grass strip is required along one side (at a minimum, collectors may require sidewalk on both sides) of all other street types. Sidewalk exists along the Stewart Mill Road frontage.

Transit in Vicinity:              No transit in the area.

Traffic Impact Study:          Yes, required per TIS Ordinance. Please see the end of the staff report for the Executive Summary of the TIS.

Street Connectivity:            N/A.

Other:                                N/A.

**IMPACT ANALYSIS**

**Land Use Compatibility**

The proposed **CD-PI** (Conditional District-Public and Institutional) zoning would allow land uses that are compatible with the general character of the area.

**Connections 2025 Comprehensive Plan Policies**

The Generalized Future Land Use Map designates this location as **Potential Employment Center Pending Further Study**. The requested **CD-PI** (Conditional District-Public and

Institutional) zoning district is inconsistent with this GFLUM designation. A request to change this GFLUM designation has been submitted.

**Connections 2025 Written Policies**

Growth at the Fringe Goal: Provide a development framework for the fringe that guides sound, sustainable patterns of land use, limits sprawl, protects rural character, evidences sound stewardship of the environment, and provides for efficient provision of public services and facilities as the City expands. Development will increase density and mix land uses at a pedestrian scale with sidewalks, bikeways, and where possible, public transit.

Community Facilities Goal: Provide community facilities, services, and infrastructure in a cost-effective manner to meet citizens’ needs, contribute to quality of life, and support desired land use patterns.

POLICY 9C.3: Ensure that service delivery departments are provided with adequate new resources to serve newly annexed areas.

**Connections 2025 Map Policies**

Institutional: This designation applies to university and college campuses, major medical/health care concentrations, and similar large-scale institutional activity centers.

**Comprehensive Plan Amendment History**

Case #	Date	Request Summary
N/A		

**Applicant Stated Reasons for Request**

The GFLUM Plan proposes this site for **Potential Employment Center – Pending Further Study**. This is a designation for areas that required further study to determine the best land use classification. It was not intended to be a permanent designation. They are identified as such due to site characteristics such as convenient access to highways, parcel size, topography, proximity to other business uses, etc. The proposed designation is a permanent designation of **Institutional**, which is a designation that applies to educational and institutional campuses, such as the proposed school site.

The subject site, developed institutionally, would be compatible with the mixture of surrounding existing and proposed land uses, and would also provide a transitional land use buffer for adjacent residential properties. The site also offers a natural buffer comprised of a 100-year flood zone area. Additionally, schools in general remain compatible with residential developments.

**Explain in detail the conditions that you think may warrant a Plan Amendment – Per Applicant and Application**

The approved 2008 GCS Bond referendum provides for the construction of a 700- seat elementary school to serve the southeastern area of Guilford County. This school will help relieve overcrowding at Alamance Elementary School. It will also assist with overcrowded schools such as Sedalia Elementary and McLeansville Elementary. The location of 1516 Stewart Mill Road, its favorable physical attributes (topography, etc) and availability to public water and sewer, along with access would serve students from the southeast portion of Guilford County and accomplish the goals established by the Board of Education.

**COMPREHENSIVE POLICY PLAN ANALYSIS****Need for Proposed Change**

The existing GFLUM designation of Potential Employment Center – Pending Further Study indicates that during development of the 2025 Comprehensive Plan, this area was not yet annexed, but anticipated to be an area of influence in the next 10 years. The site was also given this designation due to the positive topographic, highway access, proximity to other businesses and large parcel size that would allow for development of a large center of activity. At the time it was envisioned that this area would develop as an employment center, similar to sites to the west.

The location of a public school on the subject property would necessitate the need for a GFLUM amendment, both because of the change in proposed development pattern and to provide it with a permanent GFLUM land use designation.

While the Connections 2025 Comprehensive Plan identified this area and surrounding areas for potential employment centers, and staff feels it remains the most appropriate designation, the proposal by the Guilford County School Board is a sensible alternative land use category.

**Effect of the proposed Change on the Need for City Services and Facilities (e.g. roadway level of service) – see Transportation comments.**

**Implications, if any, the Amendment may have for Other Parts of the Plan**

Should the property develop as a school, that portion of the GFLUM will need to be analyzed for potential changes that may occur as a result, in terms of land use, transportation, infrastructure, etc.

**Unforeseen Circumstances or the Emergence of New Information (e.g. significant economic opportunity in Tier 2 or 3) – None envisioned other than the need to review the subject area during the update of the Comprehensive Plan and establish more concrete land use designations.**

**PLANNING BOARD COMMENTS**

The proposal was presented at the August 8, 2010 Planning Board Meeting and the following comments were made by the Board:

- May be good for Institutional land use designation due to the good road access.
- There is some concern about taking valuable land for Institutional when it could be better used as a Corporate Park/Business Campus site
- If there is no other alternative land use for the site at this time, Institutional would seem to be the best alternative.

**CONFORMITY WITH OTHER PLANS**

**City Plans – N/A**

**Other Plans - N/A**

## **Staff/Agency Comments**

### **Water Resources - N/A**

### **Housing and Community Development**

If approved, the long-term sustainability of this proposed rezoning and development would be greatly enhanced by improving its transportation access and connectivity. This could be accomplished by providing safe walking and bicycling routes to this proposed school site as follows:

- Ensuring adequate connection to the planned Little Alamance Creek Trail (#46 in the BiPed Plan), which skirts the northern half of the site, and the planned Little Alamance Spur Trail (#80 in the BiPed Plan), which extends north from the northern boundary of the site, crossing Interstate 40/85 near A T & T Drive; and
- Including convenient, secure bicycle parking facilities.

### **Planning**

The subject property, which is generally located north of Stewart Mill Road, south of Millstream Road, east of AT&T Drive and west of Creek Road, contains 44.60 acres of platted single-family lots. The immediate neighborhood is developed with corporate offices and single-family dwellings. The applicant is proposing to rezone this site for educational facilities (binding condition).

This request, if approved, will help meet the needs of present and future Greensboro citizens by way of providing community facilities, services, and infrastructure in a cost-effective manner to meet citizens' needs, contribute to quality of life, and support desired land use patterns. It will also provide a development framework for the fringe that will guide sound, sustainable patterns of land use, limit sprawl and provide for efficient provision of public services and facilities as the City expands.

Staff believes that this request will be consistent with the requested Generalized Future Land Use Map (GFLUM) designation. Staff is also of the opinion that the request will be compatible with the existing development and trend in the surrounding neighborhood.

### **STAFF RECOMMENDATION**

Staff recommends **approval** of the requested **CD-PI** (Conditional District-Public and Institutional) zoning district.

## **Future Elementary School at Stewart Mill Road – Transportation Impact Analysis**

Prepared for Guilford County Schools

May 13, 2010

### **Executive Summary**

Guilford County Schools plans to build a new elementary school which will be located on Stewart Mill Road in Greensboro, North Carolina. As currently planned, the elementary school will be designed for 700 students, but could accommodate additional students with the addition of mobile capacity to the site. For the purposes of this study, we have estimated a capacity of 800 elementary students. The school could have up to 90 staff members (with a population of approximately 800 students) and could be served by up to 16 buses with this total population.

This elementary school expects to attract students from areas of population in eastern Greensboro and Guilford County. Access to the site will be provided by two (2) driveways on Stewart Mill Road. One driveway will serve vehicular traffic and the other driveway will provide bus access to and from the school.

Davenport Transportation Consulting (DTC) was retained to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to accommodate the impacts of both background traffic and new development traffic. The following intersections were included in the study:

- Mt. Hope Church Road at Millstream Road (signalized)
- Mt. Hope Church Road at AT&T Drive (unsignalized)
- Mt. Hope Church Road at Stewart Mill Road (unsignalized)
- Stewart Mill Road at Terrapin Ridge Drive (unsignalized)

Additionally, during the scoping of this development, GDOT requested that an internal circulation review should be carried out to ensure that on-site stacking issues are addressed for the proposed school. DTC has developed recommendations based on our findings to address the on-site stacking.

The above intersections were analyzed at arrival and dismissal peaks under the following conditions:

- 2010 Existing Conditions
- Future No-Build Conditions
- Future Build-Out Conditions

The anticipated opening day for the school is August 2012. Traffic conditions were analyzed for both the Arrival and Dismissal peaks. School officials have indicated arrival time would be from 7:30 to 8:00 am and dismissal times would be from 2:30 to 3:00 pm. The Greensboro Department of Transportation (GDOT) was contacted to obtain background information and to ascertain the elements to be covered in this Traffic Impact Analysis (TIA). Information regarding the property was provided by Guilford County Schools.

**Level of Service Results**

Table A represents the summary of the level of service analysis for all study scenarios.

Table A - Level of Service Summary				
Arrival Peak	2010 Existing	2012 Future No Build	2012 Build	2012 Build with Improvements
Mt Hope Church Road @ Millstream Road	B (12.9)	B (13.6)	C (21.1)	
Mt Hope Church Road @ AT&T Drive	A (9.5) WB Approach	A (9.6) WB Approach	C (17.1) WB Approach	
Mt Hope Church Road @ Stewart Mill Drive	A (9.5) WB Approach	A (9.6) WB Approach	F (91.0) WB Approach	C (22.9)
Stewart Mill Drive @ Terrapin Ridge Drive			B (12.7) SB Approach	
Dismissal Peak	2010 Existing	2012 Future No Build	2012 Build	2012 Build with Improvements
Mt Hope Church Road @ Millstream Road	A (7.6)	A (8.0)	A (9.6)	
Mt Hope Church Road @ AT&T Drive	A (8.9) WB Approach	A (8.9) WB Approach	B (10.9) WB Approach	
Mt Hope Church Road @ Stewart Mill Drive	A (8.9) WB Approach	A (8.9) WB Approach	B (10.6) WB Approach	A (9.9)
Stewart Mill Drive @ Terrapin Ridge Drive			A (9.6) SB Approach	
LOS (delay in seconds)				
Note for unsignalized conditions, LOS and delay indicates only minor street approach with longest delay				

**Mt. Hope Church Road at Millstream Road**

This signalized intersection is expected to operate at LOS B and LOS A during existing Arrival and Dismissal peaks, respectively. During the 2012 future no build analysis year, this intersection is projected to remain at LOS B and LOS A during Arrival and Dismissal peaks, respectively. With the addition of school site traffic, the intersection is projected to operate at LOS C during the Arrival peak and LOS A during the Dismissal peak. No improvements are recommended.

**Mt. Hope Church Road at AT&T Drive**

This unsignalized intersection is expected to operate at LOS A during existing and 2012 future no build Arrival and Dismissal peaks. In the future build scenario, LOS C is anticipated for the Arrival peak and LOS B during the Dismissal peak. No improvements are recommended.



**Mt. Hope Church Road at Stewart Mill Road**

This unsignalized intersection is expected to operate at LOS A during existing and 2012 future no build Arrival and Dismissal peaks. In the future build scenario, LOS F and LOS B conditions are expected during the Arrival and Dismissal peaks, respectively. In order to improve the level of service at this intersection as a result of school traffic, we recommend the following:

- Provide a southbound left turn lane on Mt. Hope Church Road with 100 feet of storage, appropriate deceleration length and appropriate taper
- Provide a separate left turn lane from Stewart Mill Road with 100 feet of storage and appropriate taper.

**Stewart Mill Road at Terrapin Ridge Drive**

Our LOS analysis indicates this intersection is projected to function at LOS B during the Arrival peak and LOS A during the Dismissal peak period. Our field investigation, however, indicates that Stewart Mill Road is not striped. We recommend striping Stewart Mill Road as a 2-lane undivided cross-section with directional traffic separated by a double yellow centerline.

**Summary and Conclusion**

This analysis has been conducted based on the scope given by the City of Greensboro. We have identified all areas of deficiency and made recommendations for improvements where necessary. Table B below summarizes the recommended improvements for 2012 future build scenarios. In conclusion, should our recommendations be implemented, this project would not have a serious or detrimental effect on transportation capacity within the study area.

<b>Table B - Recommended Improvement Summary</b>	
Mt Hope Church Road @ Millstream Road	• No improvements are recommended.
Mt Hope Church Road @ AT&T Drive	• No improvements are recommended.
Mt Hope Church Road @ Stewart Mill Drive	<ul style="list-style-type: none"> <li>• Provide a southbound left turn lane on Mt. Hope Church Road with 100 feet of storage, appropriate deceleration length and appropriate taper.</li> <li>• Provide a separate left turn lane from Stewart Mill Road with 100 feet of storage and appropriate taper.</li> </ul>
Stewart Mill Drive @ Terrapin Ridge Drive	• We recommend striping Stewart Mill Road as a 2-lane undivided cross-section with <u>directional traffic separated by a double yellow centerline.</u>
Site plan and internal circulation review	• The traffic circulation pattern as indicated on the site plan provides approximately <b>1900 feet</b> of stacking distance from the drop-off / pick-up location upstream to Stewart Mill Road. <b>This satisfies the MSTA-expected queue of 1,323 feet.</b> Additionally, review of the site circulation using Synchro / Sim Traffic software does not indicate any queuing problems.