

Atlanta Regional Commission  
200 Northcreek, Suite 300  
3715 Northside Parkway  
Atlanta, Georgia 30327-2809



Harry West  
Director

August 19, 1998

Honorable Hollis Lathem, Chairman  
Cherokee County Commission  
90 North Street, Suite 310  
Canton, GA. 30114

RE: Development of Regional Impact Review  
East Cherokee/Thomas Roads Subdivision

Dear Hollis:

I am writing to let you know that the ARC staff has completed review of the East Cherokee/Thomas Roads Subdivision, a Development of Regional Impact (DRI). Our finding is that this DRI is in the best interest of the State.

Enclosed is a copy of our review report along with a copy of comments we received from Cherokee County Schools. If you have any questions, please feel free to call me or Beverly Rhea (404-364-2562).

Sincerely,

A handwritten signature in black ink, appearing to read 'Harry West', is written over the typed name.

Harry West  
Director

Enclosure

c Mr. Ken Patton, Cherokee County  
Mr. Paul E. Corley, Applicant  
Mr. Wayne Shackelford, GDOT  
Mr. Harold Reheis, GEPD  
Mr. Paul Radford, GDCA

Facility: East Cherokee/Thomas Road Tract Subdivision

Preliminary Report: July 14, 1998

Final Report: August 19, 1998

## DEVELOPMENTS OF REGIONAL IMPACT

### REVIEW REPORT

#### GENERAL

According to information on the review form or comments received from potentially affected governments:

**Is the proposed project consistent with the host-local government's comprehensive plan? If not, identify inconsistencies.**

Yes.

**Is the proposed project consistent with any potentially affected local government's comprehensive plan? If not, identify inconsistencies.**

No inconsistencies were identified in the review process.

**Will the proposed project impact the implementation of any local government's short-term work program? If so, how?**

No.

**Will the proposed project generate population and/or employment increases in the Region? If yes, what would be the major infrastructure and facilities improvements needed to support the increase?**

According to regional averages, the development of 660 homes could accommodate a population of 1,650 including 476 students according to regional averages. The Cherokee County Board of Education estimates 792 students.

**What other major development projects are planned in the vicinity of the proposed project?**

ARC has not reviewed any other major developments on the east side of I-575 in Cherokee County.

**Will the proposed project displace housing units or community facilities? If yes, identify and give number of units, facilities, etc.**

No.

**Will the development cause a loss in jobs? If yes, how many.**

No.

### **LOCATION**

**Where is the proposed project located within the host-local government's boundaries?**

The site proposed for development is in southeast Cherokee County in the East Cherokee Drive/Thomas Road area. 84°25'/34°11'

**Will the proposed project be located close to the host-local government's boundary with another local government? If yes, identify the other local government.**

The development is approximately 2 miles from the City of Canton.

**Will the proposed project be located close to land uses in other jurisdictions that would benefit or be negatively impacted by the project? Identify those land uses which would benefit and those which would be negatively affected and describe impacts.**

No.

### **ECONOMY OF THE REGION**

According to information on the review form or comments received from potentially affected governments:

**What new taxes will be generated by the proposed project?**

Information submitted with the review indicates \$1,001,500 annual property tax estimated at build out.

**How many short-term jobs will the development generate in the Region?**

400 plus 15 long-term

**Is the regional work force sufficient to fill the demand created by the proposed project?**

Yes.

**In what ways could the proposed development have a positive or negative impact on existing industry or business in the Region?**

The development will compete with other existing and underway subdivisions in the vicinity.

**NATURAL RESOURCES**

**Watershed Protection**

The proposed site is located within a large water supply watershed, however, no minimum protection criteria apply.

**Floodplains**

Portions of the proposed project site are located within the 100 year floodplain. Steps should be taken by Cherokee County to mitigate potential impacts on these floodplains. The Atlanta Regional Commission's Regional Development Plan notes that "all structures that can be damaged or land uses that can impede flood waters or reduce storage volume must be built outside the intermediate region (one percent) flood limits (i.e., outside the 100-year flood limit), with the exception that a stream crossing may vary from this policy, if constructed so as to permit passage of a 100-year flood with minimum feasible flow impedance, storage volume reduction, and upstream or downstream erosion or deposition."

**Georgia Erosion and Sedimentation Act / Stream Buffer Requirements**

This act requires that a 25 ft. wide natural vegetative buffer be maintained on both sides of streams designated "State Waters." ARC recommends that the developer work with the state to determine if the portion of the intermittent tributary to the Mill Creek located within the proposed site is considered "State Waters," and provide protection measures if appropriate. ARC also recommends that the developer work with the Cherokee County to determine what the stream buffer requirements must be under the County's Storm Water Management ordinance.

**Storm Water / Water Quality**

Steps should be taken to limit the amount of pollutants that will be produced during and after construction. During construction, the project should conform to the County's erosion and sediment control requirements. After construction, water quality can be impacted without storm water pollution controls. The amount of pollutants that will be produced after construction of the proposed East Cherokee/Thomas Road Tract Subdivision development was estimated by ARC. These estimates are based on some simplifying assumptions for typical pollutant loading factors (lbs/ac/yr). The loading factors are based on the results of regional storm water monitoring data from the Atlanta Region. The following table summarizes the results of the analysis.

### Estimated Pounds of Pollutants Per Year

<u>Land Coverage</u>	<u>Total Phosphorus</u>	<u>Total Nitrogen</u>	<u>BOD</u>	<u>TSS</u>	<u>Zinc</u>	<u>Lead</u>
Medium Density SF (300 ac.)	405	1173	12900	240300	102	24

If the development is approved, Cherokee County should take steps to mitigate potential impacts.

Due to the density of development and its proximity to several small streams, ARC staff recommends stormwater controls be developed to reduce peak flows into the tributaries. Increased volume and velocity of stormwater runoff can decrease water quality and cause erosive scouring of the streams banks. Precautions should be taken which will minimize and mitigate the potential adverse effects of this project on the water resources in the area.

#### Structural Storm Water Pollution Controls

Cherokee County should require that the developer submit a storm water management plan as a key component of the Plan of Development. The storm water plan should include location, construction design details and all engineering calculations for all storm water quality control measures. Atlanta Regional Commission staff recommends that the County require that any structural controls be designed to accommodate installation, operation and maintenance of automatic equipment at inlet and outlet location for the monitoring of flow rates and water quality. It is recommended that the monitoring program consider the following minimum elements:

- monitoring of four storms per year (1 per quarter);
- collection of a flow weighted composite of the inflow to the structure during the entire storm event;
- collection of a flow weighted composite of the outflow from the structure - the sampling period should include the peak outflow resulting from the storm event;
- analysis of inflow and outflow flow weighted composite samples for biochemical oxygen demand (BOD), total suspended solids (TSS), zinc, lead, total phosphorus (TP) and total nitrogen (TKN & NO<sub>3</sub>); and,
- collection of grab samples at the inlet and outlet locations during the periods of peak inflow and outflow for pH, dissolved oxygen (DO) and fecal coliform bacteria.

The County should finalize the number and size of storms to be monitored as well as who should be responsible for conducting the monitoring. Monitoring should be conducted at the developer's and owner's expense. Analysis should conform to EPA standards.

The storm water plan should require the developer to submit a detailed, long-term schedule for inspection and maintenance of the storm facilities. This schedule should describe all maintenance and inspection requirements and persons responsible for performing maintenance and inspection activities. These provisions and the monitoring program should be included in a formal, legally binding maintenance agreement between the County and the responsible party.

In addition to inspections required in the storm water management plan, the formal maintenance agreement between the developer and Cherokee County should allow for periodic inspections of the storm water facilities to be conducted by appropriate County personnel. If inadequate maintenance is observed, the responsible party should be notified and given a period of time to correct any deficiencies. If the party fails to respond, the County should be given the right to make necessary repairs and bill the responsible party.

The County should not release the site plans for development or issue any grading or construction permits until a storm water management plan has been approved and a fully executed maintenance/monitoring agreement is in place.

### **HISTORIC RESOURCES**

**Will the proposed project be located near a national register site? If yes, identify site.**

No.

**In what ways could the proposed project create impacts that would damage the resource?**

N/A

**In what ways could the proposed project have a positive influence on efforts to preserve or promote the historic resource?**

N/A

## **INFRASTRUCTURE**

### **Transportation**

**How much traffic (both average daily and peak am/pm) will be generated by the proposed project?**

Land Use	Sq. Feet or units	Weekday	AM Peak Hour		PM Peak Hour	
			Enter	Exit	Enter	Exit
Single Family Residential	660 units	5,883	118	354	379	215

These trip generation estimates were prepared using the Institute of Traffic Engineers Trip Generation (6th Edition) manual.

**What are the existing traffic patterns and volumes on the local, county, state and interstate roads that serve the site?**

The following volumes are based on 1997 GDOT coverage counts from area facilities that will likely provide the primary routes for traveling to the proposed development. 2010 volumes for these facilities were obtained from the ARC transportation model.

Facility	1997			2010		
	Lanes	Volume	V/C Ratio	Lanes	Volume	V/C Ratio
SR 140 from I-575 to Brick Mill Rd (106)	2	6000	.3	2	11,900	.7
SR 140 from Brick Mill Rd to East Cherokee Dr (108)	4	8000	.2	4	12,200	.2
SR 140 from East Cherokee Dr to Hickory St (110)	4	7700	.2	4	9,400	.3

The traffic analysis suggests that area roads have and will maintain adequate capacity to serve the access and mobility needs of motorized vehicle traffic.

**What transportation improvements are under construction or planned for the Region that would affect or be affected by the proposed project? What is the status of those improvements (long or short range or other)?**

The ARC's adopted Interim Atlanta Regional Transportation Plan: 2020 and Interim Atlanta Regional Transportation Improvement Program FY 1999 - FY 2001 and the Atlanta Region Bicycle and Pedestrian Walkways Plan, 1995 Update includes no projects in the vicinity of this site.

**Will the proposed project be located in a rapid transit station area? If yes, how will the proposed project enhance or be enhanced by the rapid transit system?**

No.

**Is the site served by transit? If so, describe type and level of service.**

No.

**Are there plans to provide or expand transit service in the vicinity of the proposed project?**

No.

**What transportation demand management strategies does the developer propose (carpool, flex-time, transit subsidy, etc.)?**

None.

**What is the cumulative generation of this and other DRIs or major developments? Is the transportation system (existing and planned) capable of accommodating these trips?**

The traffic analysis suggests that area roads have and will maintain adequate capacity to serve the access and mobility needs of motorized vehicle traffic. To ensure that the access and mobility needs of non-motorized modes of transportation are met the developer should install:

- an internal sidewalk network connecting all portions of the development and;
- sidewalks along external road frontages.

## **INFRASTRUCTURE**

### **Wastewater and Sewage**

**How much wastewater and sewage will be generated by the proposed project?**

0.264 MGD

**Which facility will treat wastewater from the project?**

Rose Creek Treatment Plant



**What is the current permitted capacity and average annual flow to this facility?**

8 MGD Capacity  
Approximately 1 MGD flow

**What other major developments will be served by the plant serving this project?**

None that ARC has reviewed.

#### **INFRASTRUCTURE**

##### **Water Supply and Treatment**

**How much water will the proposed project demand?**

0.304 MGD

**How will the proposed project's demand for water impact the water supply or treatment facilities of the jurisdiction providing the service?**

Minimal impact.

#### **INFRASTRUCTURE**

##### **Solid Waste**

**How much solid waste will be generated by the project? Where will this waste be disposed?**

1,008 tons

**Other than adding to a serious regional solid waste disposal problem, will the project create any unusual waste handling or disposal problems?**

No.

**Are there any provisions for recycling this project's solid waste.**

None stated.

## **INFRASTRUCTURE**

### **Other facilities**

**According to information gained in the review process, will there be any unusual intergovernmental impacts on:**

- Levels of governmental service?
- Administrative facilities?
- Schools?
- Libraries or cultural facilities?
- Fire, police, or EMS?
- Other government facilities?
- Other community services/resources (day care, health care, low income, non-English speaking, elderly, etc.)?

This is a rapidly growing area which will have an increased demand for all services. According to the Cherokee County Board of Education, the development could add 792 students to the area necessitating 16 bus routes and 40 additional teachers.

## **HOUSING**

**Will the proposed project create a demand for additional housing?**

No.

**Will the proposed project provide housing opportunities close to existing employment centers?**

Yes.

**Is there housing accessible to the project in all price ranges demanded?**

N/A

**Is it likely or unlikely that potential employees of the proposed project be able to find affordable\* housing?**

N/A

\* Defined as 30 percent of the income of a family making 80 percent of the median income of the Region. 1996 median family income of \$52,100 for Atlanta MSA.

**DRI AIR QUALITY ANALYSIS FOR PROPOSED THOMAS RD. DEVELOPMENT**  
*Trip Generation Rates (by sq.feet of retail, office, and hotel space)*

	Total Trips	Peak Trips	Off-peak Trips	Peak VMT	Off-peak VMT	NOx G/D	HC G/D	NOx T/D	HC T/D	NOx T/Y
<b>OFFICE</b>										
Hi-Mid Rise	0	0	0	0	0	0.00	0.00	0.000	0.000	0.000
Medical	0	0	0	0	0	0.00	0.00	0.000	0.000	0.000
<b>RETAIL/SERVICE</b>										
	0	0	0	0	0	0.00	0.00	0.000	0.000	0.000
<b>HOTEL</b>										
	0	0	0	0	0	0.00	0.00	0.000	0.000	0.000
<b>APT/HOUSE</b>										
	5,868	1,774	3,951	23,064	27,657	56,485.26	46,940.10	0.062	0.052	16.189
<b>INDUSTRIAL</b>										
Autos	0	0	0	0	0	0.00	0.00	0.000	0.000	0.000
Trucks	0	0	0	0	0	0.00	0.00	0.000	0.000	0.000

<b>Impact of Total Development</b>	<b>0.062</b>	<b>0.052</b>	<b>16.189</b>
<p>* Reductions for passby trips, if any, based on ITE Trip Generation passby descriptions.</p>			
	<b>Tons per acre</b>	<b>NOx</b>	<b>0.026</b>

# Cherokee County Board of Education

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July 27, 1998

Ms. Beverly Rhea  
Review Coordinator  
Atlanta Regional Commission  
200 Northcreek, Suite 300  
3715 Northside Parkway  
Atlanta, GA 30327-2809

Mike

Dear Ms. Rhea:

In reply to your request for review, I submit the following information.

The East Cherokee/Thomas Road Tract Subdivision is in the Hickory Flat Elementary, Dean Rusk Middle School and Sequoyah High School attendance zones.

My staff uses an estimate of 1.2 school-age children per household when determining enrollment impact. Using this estimate, this development would add 792 children to an already booming student population.

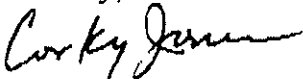
Using this estimate to calculate other costs to the taxpayers of Cherokee County, we can estimate that 16 additional bus routes must be established and approximately 40 additional teachers would be hired.

Enrollments and capacities for each of the aforementioned schools as of June 1998:

	Enrollment	Capacity
Hickory Flat	801	1,050
Dean Rusk	802	875
Sequoyah	1,426	1,600

Thank you for the opportunity to respond to your request.

Sincerely,



Corky Jones  
Superintendent

*Education Today For A Better Tomorrow*