



REGIONAL REVIEW FINDING

Atlanta Regional Commission • 40 Courtland Street NE, Atlanta, Georgia 30303 • ph: 404.463.3100 • fax: 404.463.3105 • www.atlantaregional.com

DATE: 10/16/2004

ARC REVIEW CODE: R409161

TO: Mayor Cecil Pruett
ATTN TO: Marie Garrett, Special Advisor to the Mayor
FROM: Charles Krautler, Director

NOTE: This is digital
signature. Original on file.

The Atlanta Regional Commission (ARC) has completed regional review of the following Development of Regional Impact (DRI). Below is the ARC finding. The Atlanta Regional Commission reviewed the DRI with regard to conflicts to regional plans, goals, and policies and impacts it might have on the activities, plans, goals, and policies of other local jurisdictions and state, federal, and other agencies. The finding does not address whether the DRI is or is not in the best interest of the local government.

Submitting Local Government: City of Canton
Name of Proposal: Etowah Shoals Master Plan

Review Type: Development of Regional Impact

Date Opened: 9/16/2004

Date Closed:
10/16/2004

FINDING: After reviewing the information submitted for the review, and the comments received from affected agencies, the Atlanta Regional Commission finding is that the DRI is in the best interest of the State.

Additional Comments: The Regional Development Policies adopted by the ARC strive to advance sustainable development, protect environmentally sensitive areas, and create a regional network of greenspace. Residential developments in rural areas can accomplish these goals through conservation subdivisions that protect rural character, reduce public infrastructure costs, and create areas of greenspace. The ARC Community Toolkit for Conservation Subdivision design recommends in rural areas that at least 40% of the site, specifically the developable area, be dedicated to greenspace and remain in its natural state. Residential is then clustered in the remainder of the site. The rural character of this site and surrounding area in Cherokee County should prompt the City of Canton to achieve a conservation subdivision with this development. The City of Canton's open space requirement for a planned unit development is a minimum of 15% of the total site acreage. The 71 acres currently proposed as open space is 18% of the entire 391.3 acres. It is strongly recommended that the City of Canton require more open space with this planned unit development based on the current natural state of the site, topography, and the Etowah River.

THE FOLLOWING LOCAL GOVERNMENTS AND AGENCIES RECEIVED NOTICE OF THIS REVIEW:

ARC LAND USE PLANNING
ARC DATA RESEARCH
GEORGIA DEPARTMENT OF NATURAL RESOURCES
CITY OF HOLLY SPRINGS
CITY OF BALL GROUND

ARC TRANSPORTATION PLANNING
GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS
GEORGIA REGIONAL TRANSPORTATION AUTHORITY
CHEROKEE COUNTY SCHOOLS

ARC ENVIRONMENTAL PLANNING
GEORGIA DEPARTMENT OF TRANSPORTATION
CHEROKEE COUNTY
CITY OF WOODSTOCK

If you have any questions regarding this review, Please call Mike Alexander, Review Coordinator, at (404) 463-3302. This finding will be published to the ARC website.

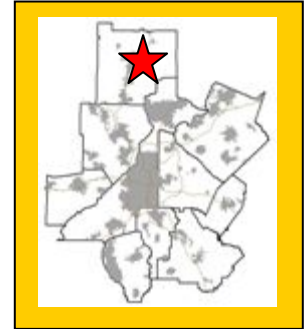
The ARC review website is located at: <http://www.atlantaregional.com/qualitygrowth/reviews.html>.

Preliminary Report:	Sept 16, 2004	DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT	Project:	Etowah Shoals #569
Final Report Due:	October 16, 2004		Comments Due By:	Sept 30, 2004

FINAL REPORT SUMMARY

PROPOSED DEVELOPMENT:

Etowah Shoals is a mixed use development consisting of 525 residential townhomes, 735 single family units, 164,000 square feet of commercial space, and a private on 391.3 acres of land in Cherokee County along Canton Hwy. The proposed development is also including 71 acres of passive and active recreational parks.



PROJECT PHASING:

The project is being proposed in one phase with a project build out date for 2008.

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.

The project site is currently zoned agricultural in Cherokee County. The proposed zoning is PUD (planned unit development) and is being considered for annexation into the City of Canton. The proposed zoning would be consistent with the City of Canton's Future Land Use Map.

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

No inconsistencies were identified.

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

No impacts were determined.

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?

Yes, the proposed development would increase the need for services in the area for existing and future residents.

What other major development projects are planned near the proposed project?

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The ARC has reviewed other major development projects, known as Area Plan (1984 to 1991) or as a DRI (1991 to present), within a mile radius of the proposed project.

YEAR	NAME
2003	PARK VILLAGE
2001	CANTON PLACE
2001	BLUFFS AT TECHNOLOGY PARK
2000	VIEW POINT
1998	HORTON/TORREY HWY TRACT 20

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

Based on information submitted for the review, the site is currently undeveloped forest and pasture land with a few residences and farm buildings.

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

No.

Is the proposed development consistent with regional plans and policies?

The Etowah Shoals Master Plan is a mixed use development that includes single family detached, single family attached and commercial uses. The development also includes approximately 71 acres of park land; all of it being between the railroad and the Etowah River. The development is also proposing a private school in the southwestern corner of the property.

The Regional Development Policies adopted by the ARC strive to advance sustainable development, protect environmentally sensitive areas, and create a regional network of greenspace. Residential developments in rural areas can accomplish these goals through conservation subdivisions that protect rural character, reduce public infrastructure costs, and create areas of greenspace. The ARC Community Toolkit for Conservation Subdivision design recommends in rural areas that at least 40% of the site, specifically the developable area, be dedicated to greenspace and remain in its natural state. Residential is then clustered in the remainder of the site. The rural character of the site and surrounding area in Cherokee County should prompt the City of Canton to achieve a conservation subdivision with this development.

The City of Canton's open space requirement for a planned unit development is a minimum of 15% of the total site acreage. The 71 acres currently proposed as open space is 18% of the entire 391.3 acres. It is strongly recommended that the City of Canton require more open space with this planned unit development based on the current natural state of the site, topography, and the Etowah River. Pocket parks, continuous greenways, and pedestrian trails should all be considered and implemented into the site plan. Allowing for pocket parks will give residents at the northern end of the property access to recreational space without having to use the automobile.

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Mass grading of the site should be kept to a minimum and in return the residential and commercial areas should work within the constraints of the existing topography where possible. This would allow for the additional open space that would allow the development to truly be a conservation subdivision. The City of Canton should review the ARC's Community Toolkit for Conservation Subdivisions. The Environmental Best Practices list below should be reviewed and implemented where applicable.

Access to the programmed open space and soccer fields located below the railroad is important; however, the proposed parking lot for this area should be reconsidered.

Adequate buffering should be provided behind the Wal-mart and the proposed single family residences. Areas behind the commercial buildings that back up onto single family residences, both on the site and adjacent to the site should also be adequately buffered.

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FINAL REPORT

Regional Development Plan Policies

1. Provide development strategies and infrastructure investments to accommodate forecasted population and employment growth more efficiently.
2. Guide an increased share of new development to the Central Business District, transportation corridors, activity centers and town centers.
3. Increase opportunities for mixed-use development, infill and redevelopment.
4. Increase transportation choices and transit-oriented development (TOD).
5. Provide a variety of housing choices throughout the region to ensure housing for individuals and families of diverse incomes and age groups.
6. Preserve and enhance existing residential neighborhoods.
7. Advance sustainable greenfield development.
8. Protect environmentally sensitive areas.
9. Create a regional network of greenspace that connects across jurisdictional boundaries.
10. Preserve existing rural character.
11. Preserve historic resources.
12. Inform and involve the public in planning at regional, local and neighborhood levels.
13. Coordinate local policies and regulations to support the RDP.
14. Support growth management at the state level.

BEST LAND USE PRACTICES

Practice 1: Keep vehicle miles of travel (VMT) below the area average. Infill developments are the best at accomplishing this. The more remote a development the more self contained it must be to stay below the area average VMT.

Practice 2: Contribute to the area's jobs-housing balance. Strive for a job-housing balance with a three to five mile area around a development site.

Practice 3: Mix land uses at the finest grain the market will bear and include civic uses in the mix.

Practice 4: Develop in clusters and keep the clusters small. This will result in more open space preservation.

Practice 5: Place higher-density housing near commercial centers, transit lines and parks. This will enable more walking, biking and transit use.

Practice 6: Phase convenience shopping and recreational opportunities to keep pace with housing. These are valued amenities and translate into less external travel by residents if located conveniently to housing.

Practice 7: Make subdivisions into neighborhoods with well-defined centers and edges. This is traditional development.

Practice 8: Reserve school sites and donate them if necessary to attract new schools. This will result in neighborhood schools which provide a more supportive learning environment than larger ones.

Practice 9: Concentrate commercial development in compact centers or districts, rather than letting it spread out in strips.

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Practice 10: Make shopping centers and business parks into all-purpose activity centers. Suburban shopping centers and their environs could be improved by mixing uses and designing them with the pedestrian amenities of downtowns.

Practice 11: Tame auto-oriented land uses, or at least separate them from pedestrian-oriented uses. Relegate “big box” stores to areas where they will do the least harm to the community fabric.

BEST TRANSPORTATION PRACTICES

Practice 1: Design the street network with multiple connections and relatively direct routes.

Practice 2: Space through-streets no more than a half-mile apart or the equivalent route density in a curvilinear network.

Practice 3: Use traffic-calming measures liberally. Use short streets, sharp curves, center islands, traffic circles, textured pavements, speed bumps and raised crosswalks.

Practice 4: Keep speeds on local streets down to 20 mph.

Practice 5: Keep speeds on arterials and collectors down to 35 mph (at least inside communities).

Practice 6: Keep all streets as narrow as possible and never more than four traffic lanes wide. Florida suggests access streets 18 feet, subcollectors 26 feet, and collectors from 28 feet to 36 feet depending on lanes and parking.

Practice 7: Align streets to give buildings energy-efficient orientations. Allow building sites to benefit from sun angles, natural shading and prevailing breezes.

Practice 8: Avoid using traffic signals wherever possible and always space them for good traffic progression.

Practice 9: Provide networks for pedestrians and bicyclists as good as the network for motorists.

Practice 10: Provide pedestrians and bicyclists with shortcuts and alternatives to travel along high-volume streets.

Practice 11: Incorporate transit-oriented design features.

Practice 12: Establish TDM programs for local employees. Ridesharing, modified work hours, telecommuting and others.

BEST ENVIRONMENTAL PRACTICES

Practice 1: Use a systems approach to environmental planning. Shift from development orientation to basins or ecosystems planning.

Practice 2: Channel development into areas that are already disturbed.

Practice 3: Preserve patches of high-quality habitat, as large and circular as possible, feathered at the edges and connected by wildlife corridors. Stream corridors offer great potential.

Practice 4: Design around significant wetlands.

Practice 5: Establish upland buffers around all retained wetlands and natural water bodies.

Practice 6: Preserve significant uplands, too.

Practice 7: Restore and enhance ecological functions damaged by prior site activities.

Practice 8: Detain runoff with open, natural drainage systems. The more natural the system the more valuable it will be for wildlife and water quality.

Practice 9: Design man-made lakes and stormwater ponds for maximum environmental value. Recreation, stormwater management, wildlife habitat and others.

Practice 10: Use reclaimed water and integrated pest management on large landscaped areas. Integrated pest management involves controlling pests by introducing their natural enemies and cultivating disease and insect resistant grasses.

Practice 11: Use and require the use of Xeriscape™ landscaping. Xeriscaping™ is water conserving landscape methods and materials.

BEST HOUSING PRACTICES

Practice 1: Offer “life cycle” housing. Providing integrated housing for every part of the “life cycle.”

Practice 2: Achieve an average net residential density of six to seven units per acre without the appearance of crowding. Cluster housing to achieve open space.

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Practice 3: Use cost-effective site development and construction practices. Small frontages and setbacks; rolled curbs or no curbs; shared driveways.
Practice 4: Design of energy-saving features. Natural shading and solar access.
Practice 5: Supply affordable single-family homes for moderate-income households.
Practice 6: Supply affordable multi-family and accessory housing for low-income households.
Practice 7: Tap government housing programs to broaden and deepen the housing/income mix.
Practice 8: Mix housing to the extent the market will bear.

LOCATION

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

The project is currently located in Cherokee County to be annexed into the City of Canton, bounded by the Etowah River and L&N Railroad. Canton Hwy runs adjacent to the property and York Road and Teague Drive traverse the property. River Pointe Road, a proposed four land roadway, and Teague Drive will provide access to the development.

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 proposed development is entirely within Cherokee County's jurisdiction; however, the City of Canton is considering annexing the site into the city limits.

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.

None were identified by local governments.

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?

Estimated value of the development is \$ 272,000,000 with an expected \$744,112 in annual local tax revenues.

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

Short-term jobs will depend upon construction schedule.

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

Yes.

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

To be determined during the review.

NATURAL RESOURCES

Will the proposed project be located in or near wetlands, groundwater recharge area, water supply watershed, protected river corridor, or other environmentally sensitive area of the Region? If yes, identify those areas.

Watershed Protection and Stream Buffers

The project is located on the Etowah River upstream of the City of Canton Intake, putting it within the Etowah public water supply watershed. The Etowah watershed is a large (greater than 100 square miles) water supply watershed with a direct river intake (no reservoir) and, under the Part 5 Environmental Planning Criteria; the only restrictions in such watersheds are on hazardous waste handling and disposal facilities.

The Etowah is also a Protected River under the Part 5 Environmental Planning Criteria, having an average annual flow of greater than 400 cubic feet per second (cfs). As required by the Criteria, the City of Canton has adopted the Etowah River Corridor Protection District, which consists of a 100-foot buffer along both banks of the Etowah. The submitted site plan shows no proposed development other than a riverwalk near the 100-foot buffer, but the 100-foot buffer should still be shown on the plans. Any development activity that is proposed within the Protection District, including the riverwalk, must meet the requirements of the Protection District.

The 1:24,000 USGS quad sheets for this area, Canton and Ball Ground West, show two blue line streams on or near the property. Any development on or near these streams and on any other state waters on the property are subject to the requirements of the State 25-foot Erosion and Sedimentation Act buffers, which are administered by the Environmental Protection Division of Georgia DNR. Any intrusion into these buffers will require a variance. All buffers need to be shown and clearly identified on the site plan.

Storm Water/Water Quality

The project should adequately address the impacts of the proposed development on stormwater runoff and downstream water quality. During construction, the project should conform to the relevant state and federal erosion and sedimentation control requirements. After construction, water quality will be impacted due to polluted stormwater runoff. ARC has estimated the amount of pollutants produced after the construction of the entire proposed development, based on the submitted site plan. 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. Impervious surface amounts typically found for each land use in the Atlanta Region were used. Because there is no loading factor for high-density single-family residential (lots with areas of less than 0.25 acres), all residential land on this property was classified as townhouse/apartment. Also, because there is no loading factor for institutional uses, office/light industrial was used for the private

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school. If the actual impervious coverage differs, the pollutant loadings will change from those shown. The following table summarizes the results of the analysis.

Estimated Pounds of Pollutants Per Year

Land Use	Land Area (ac)	Total Phosphorus	Total Nitrogen	<u>BOD</u>	TSS	Zinc	Lead
Commercial	13.73	23.48	238.90	1482.84	13496.59	16.89	3.02
Forest/Open	71.00	5.68	42.60	639.00	16685.00	0.00	0.00
Office/Light Industrial	15.00	19.35	256.95	1710.00	10620.00	22.20	22.20
Townhouse/Apartment	232.80	244.44	2493.29	15597.60	140844.00	176.93	32.59
TOTAL	332.53	292.95	3031.74	19429.44	181645.59	216.02	38.49

Total Percent Impervious: 40

In order to address post-construction stormwater runoff quality, the project should implement stormwater management controls (structural and/or nonstructural) as found in the Georgia Stormwater Management Manual (www.georgiastormwater.com) and meet the stormwater management quantity and quality criteria outlined in the Manual. Where possible, the project should utilize the stormwater better site design concepts included in the Manual.

HISTORIC RESOURCES

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

None have been identified.

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

Not applicable.

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

Not applicable.

INFRASTRUCTURE

Transportation

Georgia Regional Transportation Authority Review Findings

Primary site access will be available at one point at the intersection of Ball Ground Highway and a parkway proposed by the developer. From this parkway, there will be two driveways passing the commercial areas and providing access to the residential areas of the site.

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

Traffic Engineering Solutions, Inc. performed the transportation analysis. GRTA and ARC review staff agreed with the methodology and assumptions used in the analysis. The net trip generation is based on the rates published in the 6th edition of the Institute of Transportation Engineers (ITE) Trip Generation report; they are listed in the following table:

Land Use	A.M. Peak Hour			P.M. Peak Hour			24-Hour
	Enter	Exit	2-Way	Enter	Exit	2-Way	2-Way
City Park	-	-	-	-	-	-	113
Residential Condominium/Townhouse 374 units	26	120	146	123	60	183	1,997
Single Family Detached Housing 886 units	159	470	629	487	275	762	7,717
Shopping Center 60,000 square feet	72	46	118	215	233	448	4,908
Drive-in Bank 4,000 square feet	28	22	50	110	110	220	1,061
Day Care Center 11,000 square feet	74	66	140	68	77	145	872
Shopping Center 100,000 square feet	97	62	159	301	327	628	6,817
Private Elementary School 1,000 students	43	30	73	-	-	-	255
TOTAL NEW TRIPS (with reductions)	389	636	1,025	1,017	844	1,861	18,517

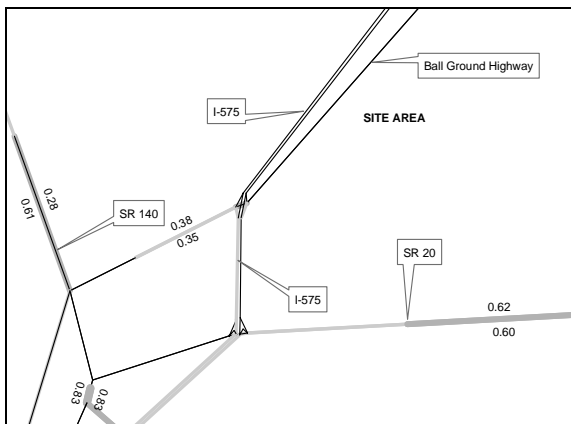
What are the existing traffic patterns and volumes on the local, county, state and interstate roads that serve the site?

Incorporating the trip generation results, the transportation consultant distributed the traffic on the current roadway network. An assessment of the existing Level of Service (LOS) and projected LOS based on the trip distribution findings helps to determine the study network. The results of this exercise determined the study network, which has been approved by ARC and GRTA. If analysis of an intersection or roadway results in a substandard LOS "D", then the consultant recommends improvements.

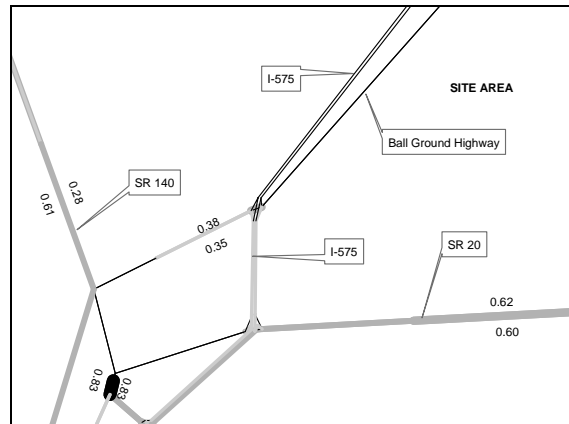
Projected traffic volumes from the Regional Travel Demand Model are compared to the assigned capacity of facilities within the study network. This data is used to calculate a volume to capacity (V/C) ratio. The V/C ratio values that define the LOS thresholds vary depending on factors such as the type of terrain traversed and the percent of the road where passing is prohibited. As a V/C ratio reaches 0.8, congestion increases. The V/C ratios for traffic in various network years are presented in the following table. Any facilities that have a V/C ratio of 1.0 or above are considered congested.

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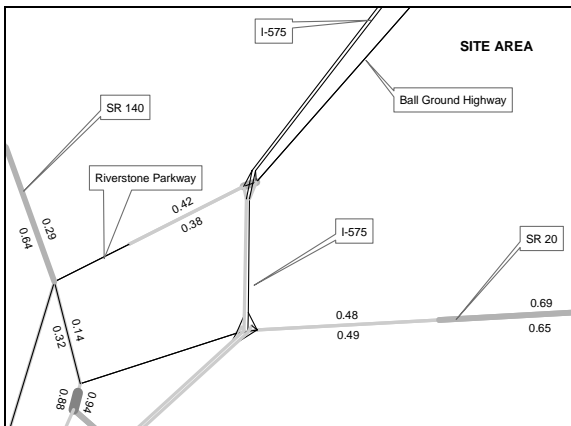
V/C Ratios



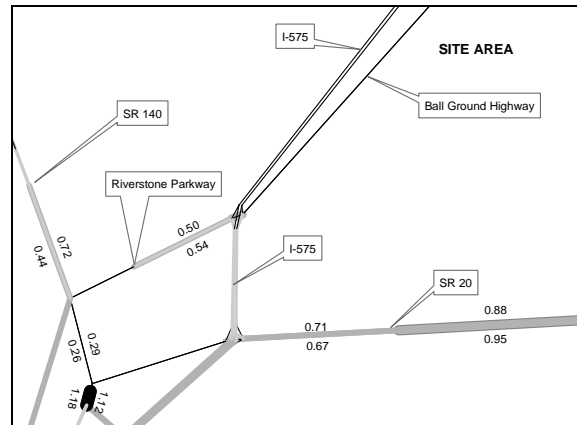
2005 AM Peak



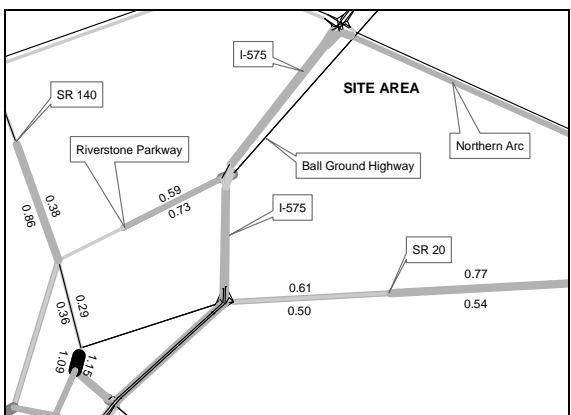
2005 PM Peak



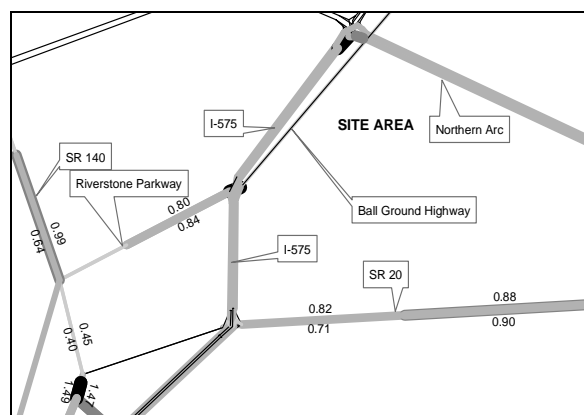
2010 AM Peak



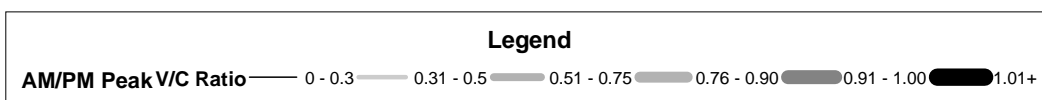
2010 PM Peak



2025 AM Peak



2025 PM Peak



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For the V/C ratio table, the data is based on 2005, 2010 and 2025 A.M./P.M. peak volume data generated from ARC's travel demand model for the 2025 RTP Limited Update and FY 2003-2005 TIP, adopted in October 2002. The demand model incorporates lane addition improvements and updates to the network as appropriate. As the life of the RTP progresses, volume and/or V/C ratio data may appear inconsistent due to (1) effect of implementation of nearby new or expanded facilities or (2) impact of socio-economic data on facility types.

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 these improvements (long or short range or other)?

2003-2005 TIP*

ARC Number	Route	Type of Improvement	Scheduled Completion Year
CH-AR-230	I-575 Auxiliary Lanes from SR 5 to SR 20	Roadway Operations	2005

2025 RTP Limited Update*

ARC Number	Route	Type of Improvement	Scheduled Completion Year
N/A	N/A	N/A	N/A

**The ARC Board adopted the 2025 RTP Limited Update and FY 2003-2005 TIP in October 2002. USDOT approved in January 2003*

Impacts of Etowah Shoals: What are the recommended transportation improvements based on the traffic study done by the applicant?

According to the findings, there will be some capacity deficiencies as a result of future year **background** traffic. The transportation consultant has made recommendations for improvements to be carried out in order to upgrade the existing level of service.

Riverstone Parkway at Medical Drive

- Relocation of an existing medical facility will reduce the number of trips resulting in recommendation for elimination of signalization at the intersection.
- If relocation does not occur, installation of a signal is recommended and widening of southbound approach suggested to accommodate traffic entering and exiting Medical Drive.

Riverstone Parkway at I-575 SB Ramp

- Modification of exiting traffic signal phasing to accommodate right turn overlap for northbound right turn movement with eastbound left turn movement only.

Riverstone Parkway at SR 140

- Modification of existing traffic signal phasing to accommodate northbound and southbound right turn overlaps.

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According to the findings, there will be some capacity deficiencies as a result of future year **total** traffic. The transportation consultant has made recommendations for improvements to be carried out in order to upgrade the existing level of service. The developer will provide 120 feet of right of way and a Parkway layout to accommodate a future six-lane divided arterial as part of City of Canton Bypass. It is intended that the proposed bypass will reduce traffic on Ballground Highway by over 20%.

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?

The proposed project is currently not in an existing rapid transit station area.

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

The site area is currently serviced by the City of Canton vanpool service.

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

There are no known plans to expand transit service within the project area.

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

None proposed by the developer. However, residents may participate in the City of Canton's Vanpool Program.

What transportation demand management strategies does the developer propose (carpool, flextime, transit subsidy, etc.)?

The development **PASSES** the ARC's Air Quality Benchmark test.

Air Quality Impacts/Mitigation (based on ARC strategies)	Credits	Total
Where Residential is dominant, >15 units/ac	6%	6%
w/in 1/4 mile of Bus Stop (CCT, MARTA, Other)	3%	3%
TMA and Parking Management/supply restrictions Program	5%	5%
Bike/ped networks that meet Mixed Use or Density target and connect to adjoining uses	5%	5%
Total		19%

What are the conclusions of this review? Is the transportation system (existing and planned) capable of accommodating these trips?

Etowah Shoals does not have the potential to pose a severe congestion issue for the surrounding area and the region. Although the V/C ratio figures in this review indicate high congestion levels along a few roadway networks, a majority of the development's traffic will utilize Ball Ground Highway to

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access the I-575 interchange and Riverstone Parkway. The development's proximity to I-575 and the City of Canton allows for a number of opportunities for mobility and other amenities outside the development.

INFRASTRUCTURE

Wastewater and Sewage

Based on regional averages, wastewater is estimated at 335,000 GPD.

Which facility will treat wastewater from the project?

Cherokee Count WSA (Canton) will provide wastewater treatment for the proposed development.

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

The capacity of the Canton Site is listed below:

PERMITTED CAPACITY MMF, MGD ¹	DESIGN CAPACITY MMF, MGD	2001 MMF, MGD	2008 MMF, MGD	2008 CAPACITY AVAILABLE +/-, MGD	PLANNED EXPANSION	REMARKS
1.89	1.89	1	4	-2.11	Expand to 4.0 by 2003; to 6 or 7 mgd before 2010.	Will serve Ball Ground in future.

MMF: Maximum Monthly Flow. Mgd: million of gallons per day.

¹ Source: Metropolitan North Georgia Water Planning District **SHORT-TERM WASTEWATER CAPACITY PLAN**, August 2002.

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

ARC has reviewed a number of major developments that will be served by this plant.

INFRASTRUCTURE

Water Supply and Treatment

How much water will the proposed project demand?

Water demand also is estimated at 363,000 GPD based on regional averages.

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

Preliminary Report:	Sept 16, 2004	DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT	Project:	Etowah Shoals #569
Final Report Due:	October 16, 2004		Comments Due By:	Sept 30, 2004

Information submitted with the review suggests that there is sufficient water supply capacity available for the proposed project.

INFRASTRUCTURE

Solid Waste

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

Information submitted with the review 1,767 tons of solid waste per year and the waste will be disposed of in Cherokee County.

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 services?**
- **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.)?**

No impacts were identified during the review. The North DeKalb Police Precinct and DeKalb County Fire Station 21 are both less than a mile from the site. Chamblee Middle School is approximately just over a mile from the site, as well as Nancy Creek Elementary School

HOUSING



Preliminary Report:	Sept 16, 2004	DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT	Project:	Etowah Shoals #569
Final Report Due:	October 16, 2004		Comments Due By:	Sept 30, 2004

Will the proposed project create a demand for additional housing?

No, the proposed project will not create a demand for additional housing. The project is proposing a total of 1,260 new housing units.

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

Yes, once developed, this project will provide housing opportunities for existing employment centers as well as providing opportunities for individuals to live and work within close proximity to one another.

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

The site proposed for the development is located in Census Tract 904. This tract had a 50.4 percent increase in number of housing units from 2000 to 2003 according to ARC's Population and Housing Report. The report shows that 56 percent, respectively, of the housing units are single-family, compared to 69 percent for the region; thus indicating a variety of housing options around the development area.

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

Likely, assuming the development is approved with multiple price ranges of housing.

* Defined as 30 percent of the income of a family making 80 percent of the median income of the Region – FY 2000 median income of \$51,649 for family of 4 in Georgia.

Your DRI ID NUMBER for this submission is: **569**
 Use this number when filling out a DRI REVIEW REQUEST.
 Submitted on: 4/2/2004 3:52:14 PM

DEVELOPMENT OF REGIONAL IMPACT

Cherokee County Initial DRI Information (Form1b)

This form is intended for use by local governments within the Metropolitan Region Tier that are also within the jurisdiction of the Georgia Regional Transportation Authority (GRTA). The form is to be completed by the city or county government for submission to your Regional Development Center (RDC), GRTA and DCA. This form provides basic project information that will allow the RDC to determine if the project appears to meet or exceed applicable DRI thresholds. Local governments should refer to both the Rules for the DRI Process 110-12-3 and the DRI Tiers and Thresholds established by DCA.

Local Government Information

Submitting Local Government:	City of Canton
*Individual completing form and Mailing Address:	Marie Garrett Special Advisor to the Mayor 687 Marietta Highway Canton, GA 30114
Telephone:	770-752-8988
Fax:	770-442-3489
E-mail (only one):	mariekg@bellsouth.net

*Note: The local government representative completing this form is responsible for the accuracy of the information contained herein. If a project is to be located in more than one jurisdiction and, in total, the project meets or exceeds a DRI threshold, the local government in which the largest portion of the project is to be located is responsible for initiating the DRI review process.

Proposed Project Information

Name of Proposed Project:	Etowah Shoals Master Plan	
Development Type	Description of Project	Thresholds
Mixed Use	Mixed use development consisting of attached and detached residential neighborhood commercial and open space	View Thresholds
Developer / Applicant and Mailing Address:	Mr. Alan Carter Greenfield Properties, LLC 2820-B Lassiter Road Suite 200 Marietta, GA 30062	
Telephone:	770-993-0531	
Fax:	770-649-5977	
Email:		
Name of property owner(s) if different from developer/applicant:	Charles Teague, Dutch and Marjorie York, and Larry Lusk	
Provide Land-Lot-District Number:	LL 241,242,263,266,240,264,265,240,276,277 to the 14th District	
What are the principal streets or roads providing vehicular access to the site?	York Drive and RiverPointe Parkway at S.R. 5	
Provide name of nearest street(s) or intersection:	River Pointe Parkway @ S.R. 5	
Provide geographic coordinates (latitude/longitude) of the center of the proposed project (optional):	/	

If available, provide a link to a website providing a general location map of the proposed project (optional). (http://www.mapquest.com or http://www.mapblast.com are helpful sites to use.):	
Is the proposed project entirely located within your local government's jurisdiction?	N
If yes, how close is the boundary of the nearest other local government?	
If no, provide the following information:	
In what additional jurisdictions is the project located?	Tracts located in unincorporated Cheorkee County. Tracts to be annexed by the City of Canton
In which jurisdiction is the majority of the project located? (give percent of project)	Name: Cherokee County, however will be 100% in the City of Canton at the time of annexation. (NOTE: This local government is responsible for initiating the DRI review process.)
	Percent of Project: 100
Is the current proposal a continuation or expansion of a previous DRI?	N
If yes, provide the following information (where applicable):	Name:
	Project ID:
	App #:
The initial action being requested of the local government by the applicant is:	Rezoning, Other annexation and master plan
What is the name of the water supplier for this site?	City of Canton
What is the name of the wastewater treatment supplier for this site?	Ctiy of Canton
Is this project a phase or part of a larger overall project?	N
If yes, what percent of the overall project does this project/phase represent?	
Estimated Completion Dates:	This project/phase: 5 to 10 years Overall project: 5 to 10 years

Local Government Comprehensive Plan

Is the development consistent with the local government's comprehensive plan, including the Future Land Use Map?	N
If no, does the local government intend to amend the plan/map to account for this development?	Y
If amendments are needed, when will the plan/map be amended?	at the time of annexation

Service Delivery Strategy

Is all local service provision consistent with the countywide Service Delivery Strategy?	Y
--	---

If no, when will required amendments to the countywide Service Delivery Strategy be complete?

Land Transportation Improvements

Are land transportation or access improvements planned or needed to support the proposed project?

Y

If yes, how have these improvements been identified:

Included in local government Comprehensive Plan or Short Term Work Program?

Y

Included in other local government plans (e.g. SPLOST/LOST Projects, etc.)?

Included in an official Transportation Improvement Plan (TIP)?

Y

Developer/Applicant has identified needed improvements?

Y

Other (Please Describe):

Submitted on: 9/9/2004 4:08:43 PM

DEVELOPMENT OF REGIONAL IMPACT DRI Review Initiation Request (Form2a)

Local Government Information

Submitting Local Government:	city of canton
Individual completing form:	marie garrett
Telephone:	770-752-8988
Fax:	770-442-3489
Email (only one):	mariekg@bellsouth.net

Proposed Project Information

Name of Proposed Project:	Etowah Shoals Mixed Use Development
DRI ID Number:	569
Developer/Applicant:	Mr. Alan Carter, Greenfield Properties, LLC 2820-B Lassiter Road Suite 200 Marietta, GA 30062
Telephone:	770-993-0531
Fax:	770-649-5977
Email(s):	

DRI Review Process

Has the RDC identified any additional information required in order to proceed with the official regional review process? (If no, proceed to Economic Impacts.)	N
If yes, has that additional information been provided to your RDC and, if applicable, GRTA?	N
If no, the official review process can not start until this additional information is provided.	

Economic Impacts

Estimated Value at Build-Out:	\$272,000,000
Estimated annual local tax revenues (i.e., property tax, sales tax) likely to be generated by the proposed development:	\$774,112
Is the regional work force sufficient to fill the demand created by the proposed project?	Y
If the development will displace any existing uses, please describe (using number of units, square feet., etc):	

Community Facilities Impacts

Water Supply

Name of water supply provider for this site:	City of Canton Water Plant
What is the estimated water supply demand to be generated by the project, measured in Millions of Gallons Per Day (MGD)?	363,000 gpd
Is sufficient water supply capacity available to serve the proposed project?	Y
If no, are there any current plans to expand existing water supply capacity?	
If there are plans to expand the existing water supply capacity, briefly describe below:	
If water line extension is required to serve this project, how much additional line (in miles) will be required?	less than one mile

Wastewater Disposal

Name of wastewater treatment provider for this site:	Cherokee County Water and Sewer Authority
What is the estimated sewage flow to be generated by the project, measured in Millions of Gallons Per Day (MGD)?	335,000 gpd
Is sufficient wastewater treatment capacity available to serve this proposed project?	Y
If no, are there any current plans to expand existing wastewater treatment capacity?	
If there are plans to expand existing wastewater treatment capacity, briefly describe below:	
If sewer line extension is required to serve this project, how much additional line (in miles) will be required?	approximately one mile

Land Transportation

How much traffic volume is expected to be generated by the proposed development, in peak hour vehicle trips per day? (If only an alternative measure of volume is available, please provide.)	1,861 peak hour per/day
Has a traffic study been performed to determine whether or not transportation or access improvements will be needed to serve this project?	Y
If yes, has a copy of the study been provided to the local government?	Y
If transportation improvements are needed to serve this project, please describe below:	

Solid Waste Disposal

How much solid waste is the project expected to generate annually (in tons)?	1,767
Is sufficient landfill capacity available to serve this proposed project?	Y
If no, are there any current plans to expand existing landfill capacity?	
If there are plans to expand existing landfill capacity, briefly describe below:	
Will any hazardous waste be generated by the development? If yes, please explain below:	
N	

Stormwater Management

What percentage of the site is projected to be impervious surface once the proposed development has been constructed?	25 percent
Is the site located in a water supply watershed?	Y
If yes, list the watershed(s) name(s) below: Etowah River Basin	
Describe any measures proposed (such as buffers, detention or retention ponds, pervious parking areas) to mitigate the project's impacts on stormwater management: Buffers along with detention/retention ponds will be required pursuant to city ordinances. Open space at approximately 71 acres will be provided and set aside for passive and active recreation. A 100 ft. undisturbed buffer is required along the Etowah River.	

Environmental Quality

Is the development located within, or likely to affect any of the following:	
1. Water supply watersheds?	Y
2. Significant groundwater recharge areas?	N
3. Wetlands?	Y
4. Protected mountains?	N
5. Protected river corridors?	Y

If you answered yes to any question 1-5 above, describe how the identified resource(s) may be affected below:
Property borders the Etowah River and is located in the Etowah River Basin with some wetland areas anticipated immediately located adjacent to the borders of the river. The city requires, by ordinance, a 100 ft. undisturbed buffer along the banks of the Etowah River. This specific area in the project is shown to include open space along the entire boundary contiguous to the Etowah River. The open space component (trails) includes the majority of the site to be passive recreation with some active recreation (soccer fields).

Has the local government implemented environmental regulations consistent with the Department of Natural Resources' Rules for Environmental Planning Criteria?

Y

Is the development located within, or likely to affect any of the following:

1. Floodplains?

Y

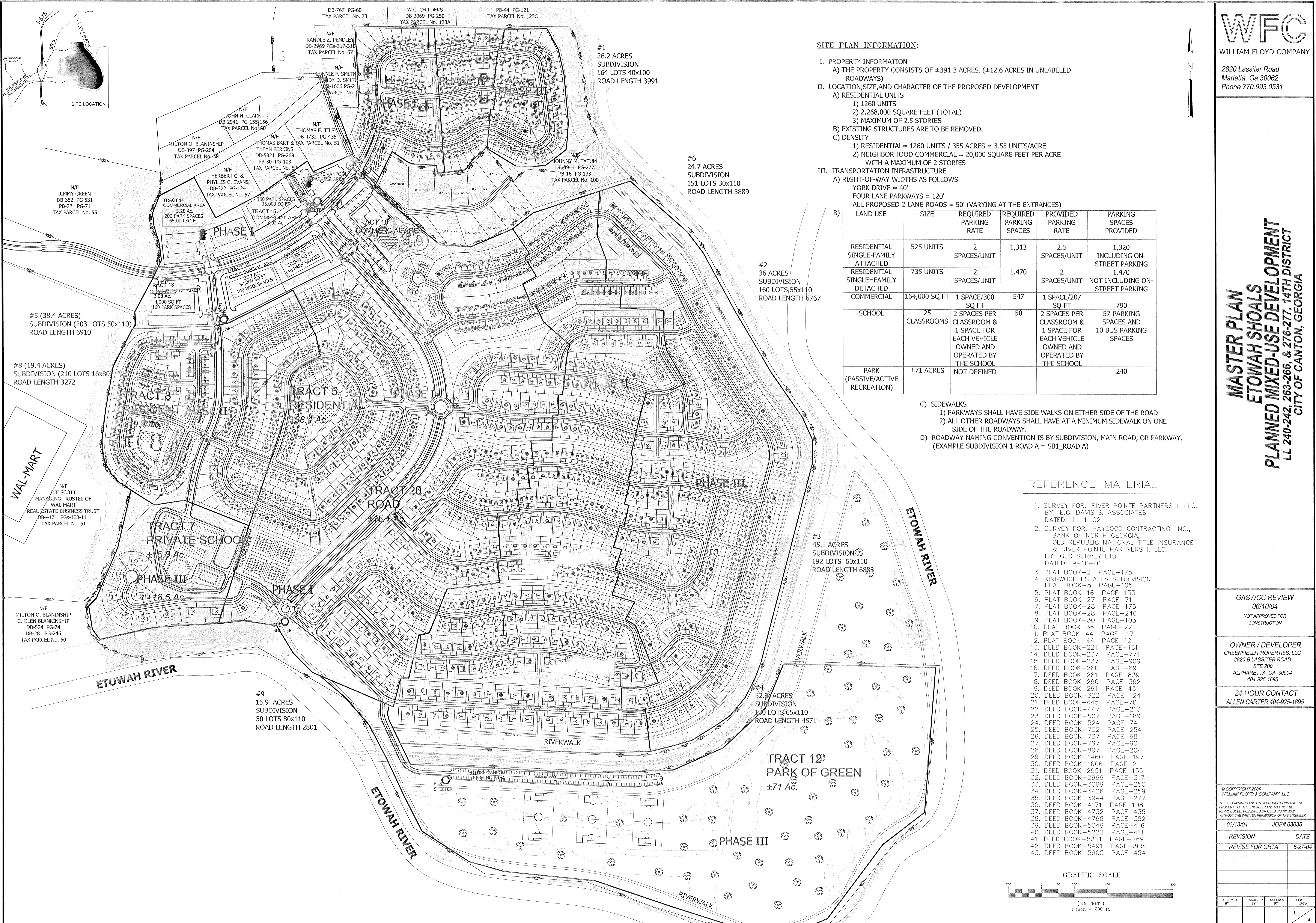
2. Historic resources?

N

3. Other environmentally sensitive resources?

N

If you answered yes to any question 1-3 above, describe how the identified resource(s) may be affected below:
Due to the location of this tract to the Etowah River, floodplain management of the areas beyond the designated floodway shall be required. The City of Canton has a Flood Plain Management Ordinance that must be complied with and followed in order for development to commence.



SITE PLAN INFORMATION:

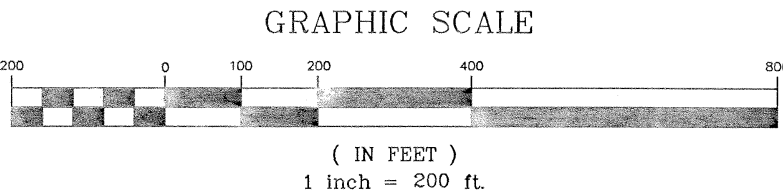
- I. PROPERTY INFORMATION
 - A) THE PROPERTY CONSISTS OF ±391.3 ACRES. (±12.6 ACRES IN UNLABELED ROADWAYS)
- II. LOCATION, SIZE, AND CHARACTER OF THE PROPOSED DEVELOPMENT
 - A) RESIDENTIAL UNITS
 - 1) 1260 UNITS
 - 2) 2,268,000 SQUARE FEET (TOTAL)
 - 3) MAXIMUM OF 2.5 STORIES
 - B) EXISTING STRUCTURES ARE TO BE REMOVED.
 - C) DENSITY
 - 1) RESIDENTIAL= 1260 UNITS / 355 ACRES = 3.55 UNITS/ACRE
 - 2) NEIGHBORHOOD COMMERCIAL = 20,000 SQUARE FEET PER ACRE WITH A MAXIMUM OF 2 STORIES
- III. TRANSPORTATION INFRASTRUCTURE
 - A) RIGHT-OF-WAY WIDTHS AS FOLLOWS
 - YORK DRIVE = 40'
 - FOUR LANE PARKWAYS = 120'
 - ALL PROPOSED 2 LANE ROADS = 50' (VARYING AT THE ENTRANCES)

LAND USE	SIZE	REQUIRED PARKING RATE	REQUIRED PARKING SPACES	PROVIDED PARKING RATE	PARKING SPACES PROVIDED
RESIDENTIAL SINGLE-FAMILY ATTACHED	525 UNITS	2 SPACES/UNIT	1,313	2.5 SPACES/UNIT	1,320 INCLUDING ON-STREET PARKING
RESIDENTIAL SINGLE-FAMILY DETACHED	735 UNITS	2 SPACES/UNIT	1,470	2 SPACES/UNIT	1,470 NOT INCLUDING ON-STREET PARKING
COMMERCIAL	164,000 SQ FT	1 SPACE/300 SQ FT	547	1 SPACE/207 SQ FT	790
SCHOOL	25 CLASSROOMS	2 SPACES PER CLASSROOM & 1 SPACE FOR EACH VEHICLE OWNED AND OPERATED BY THE SCHOOL	50	2 SPACES PER CLASSROOM & 1 SPACE FOR EACH VEHICLE OWNED AND OPERATED BY THE SCHOOL	57 PARKING SPACES AND 10 BUS PARKING SPACES
PARK (PASSIVE/ACTIVE RECREATION)	±71 ACRES	NOT DEFINED			240

- C) SIDEWALKS
 - 1) PARKWAYS SHALL HAVE SIDE WALKS ON EITHER SIDE OF THE ROAD
 - 2) ALL OTHER ROADWAYS SHALL HAVE AT A MINIMUM SIDEWALK ON ONE SIDE OF THE ROADWAY.
- D) ROADWAY NAMING CONVENTION IS BY SUBDIVISION, MAIN ROAD, OR PARKWAY. (EXAMPLE SUBDIVISION 1 ROAD A = SBL_ROAD A)

REFERENCE MATERIAL

- 1. SURVEY FOR: RIVER POINTE PARTNERS I, LLC. BY: E.G. DAVIS & ASSOCIATES DATED: 11-1-02
- 2. SURVEY FOR: HAYGOOD CONTRACTING, INC., BANK OF NORTH GEORGIA, OLD REPUBLIC NATIONAL TITLE INSURANCE & RIVER POINTE PARTNERS I, LLC. BY: GEO SURVEY LTD. DATED: 9-10-01
- 3. PLAT BOOK-2 PAGE-175
- 4. KINGWOOD ESTATES SUBDIVISION PLAT BOOK-5 PAGE-105
- 5. PLAT BOOK-16 PAGE-133
- 6. PLAT BOOK-27 PAGE-71
- 7. PLAT BOOK-28 PAGE-175
- 8. PLAT BOOK-28 PAGE-246
- 9. PLAT BOOK-30 PAGE-103
- 10. PLAT BOOK-36 PAGE-22
- 11. PLAT BOOK-44 PAGE-117
- 12. PLAT BOOK-44 PAGE-121
- 13. DEED BOOK-221 PAGE-151
- 14. DEED BOOK-237 PAGE-771
- 15. DEED BOOK-237 PAGE-909
- 16. DEED BOOK-280 PAGE-89
- 17. DEED BOOK-281 PAGE-839
- 18. DEED BOOK-290 PAGE-392
- 19. DEED BOOK-291 PAGE-43
- 20. DEED BOOK-322 PAGE-124
- 21. DEED BOOK-445 PAGE-70
- 22. DEED BOOK-447 PAGE-213
- 23. DEED BOOK-507 PAGE-189
- 24. DEED BOOK-524 PAGE-74
- 25. DEED BOOK-702 PAGE-254
- 26. DEED BOOK-737 PAGE-68
- 27. DEED BOOK-767 PAGE-60
- 28. DEED BOOK-897 PAGE-204
- 29. DEED BOOK-1460 PAGE-197
- 30. DEED BOOK-1606 PAGE-2
- 31. DEED BOOK-2951 PAGE-155
- 32. DEED BOOK-2969 PAGE-317
- 33. DEED BOOK-3069 PAGE-250
- 34. DEED BOOK-3426 PAGE-259
- 35. DEED BOOK-3944 PAGE-277
- 36. DEED BOOK-4171 PAGE-108
- 37. DEED BOOK-4732 PAGE-435
- 38. DEED BOOK-4768 PAGE-382
- 39. DEED BOOK-5049 PAGE-416
- 40. DEED BOOK-5222 PAGE-411
- 41. DEED BOOK-5321 PAGE-269
- 42. DEED BOOK-5491 PAGE-305
- 43. DEED BOOK-5905 PAGE-454



WFC
WILLIAM FLOYD COMPANY
2820 Lassiter Road
Marietta, Ga 30062
Phone 770.993.0531

MASTER PLAN
ETOWAH SHOALS
PLANNED MIXED-USE DEVELOPMENT
LL 240-242, 263-266, & 276-277, 14TH DISTRICT
CITY OF CANTON, GEORGIA

GASWCC REVIEW
06/10/04
NOT APPROVED FOR
CONSTRUCTION

OWNER / DEVELOPER
GREENFIELD PROPERTIES, LLC
2820-B LASSITER ROAD
STE 200
ALPHARETTA, GA. 30004
404-925-1695

24-HOUR CONTACT
ALLEN CARTER 404-925-1695

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03/18/04 JOB# 03035

REVISION DATE
REVISE FOR GRTA 8-27-04

DESIGNED BY	DRAFTED BY	CHECKED BY	PGM
			1