



DEVELOPMENTS OF REGIONAL IMPACT

Final Report

Northeast Georgia Regional Commission • 305 Research Drive, Athens, Georgia • www.negrc.org

The Northeast Georgia Regional Commission (NEGRC) has completed its review of the following Development of Regional Impact (DRI). This report contains the NEGRC’s assessment of how the proposed project relates to the policies, programs, and projects articulated in the Regional Plan and Regional Resource Plan. Also included is an assessment of likely interjurisdictional impacts resulting from the proposed development, as well as all comments received from identified affected parties and others during the fifteen-day comment period.

The materials presented in this report are purely advisory and under no circumstances should be considered as binding or infringing upon the host jurisdiction’s right to determine for itself the appropriateness of development within its boundaries.

Transmittal of this DRI report officially completes the DRI process. The submitting local government may proceed with whatever final official actions it deems appropriate regarding the proposed project, but it is encouraged to take the materials presented in the DRI report into consideration when rendering its decision.

Project I.D.:	DRI # 4277
Name of Project:	East Jackson Quarry
Name of Host Jurisdiction:	Jackson County

Background

The DRI review was initiated following the developer’s request for Special Use Permits in Jackson County. Potentially affected parties were asked to submit comments on the proposal during the 15-day period of 9/13/2024 to 9/28/2024.

Proposed Development

Vulcan Construction LLC is proposing construction of a rock quarry on an approximately 900-acre site in Jackson County. The quarry would have an annual rock output of 800,000 tons. The proposed site plan includes a mining area, plant area, equipment parking, and a scale house, with land reserved for a future mining area and processing plant. The site plan also includes a conservation/recreation area along Chandler Bridge Road. The plan proposes one full-access driveway on Old US Highway 441 and one right-out driveway on US 441. Currently, the site is primarily woodlands and vacant land with 5 detached single-family homes. There are two lakes and a creek located on the site, and the North Oconee River forms a portion of the site’s southern border.

The proposed site is located southwest of the intersection of US 441 (Commerce Road) and Old US Highway 441/ SR 334. The parcel numbers are 017 067A, 017 067, 017 070A, 017 068M, 017 068K, 017 068J, 017 068D2, and 017 081. The project would be completed in one phase with an estimated completion date in 2027 or 2028.

Compatibility with Existing Plans

Compatibility with Jackson County Comprehensive Plan

Jackson County's Comprehensive Plan includes both Character Areas and Future Land Use Categories. The proposal's compatibility with the Character Areas and Future Land Use categories designed in the plan for this site is mixed, as summarized below.

Compatibility with Character Areas

The majority of the site plan is in an area identified as Agricultural or Conservation on Jackson County's Character Area Map (dated 12/2/2020). The easternmost parcel (017 081) is identified as being within the Suburban character area.

The guidelines for the Agricultural character area state that appropriate future land uses include agriculture, forestry, low-density residential, and public/institutional. Industrial land uses are listed as "restricted; generally prohibited." The "Conservation/Recreation Area" in the proposed development is compatible with this character area, as it would be intended for public use. The remainder of the proposed development would involve heavy industrial activity, which conflicts with the character area's intent to preserve agricultural lands and low-density development. The Land Subdivision and Development section of the Agricultural character area's Implementation Summary states that, "land developments of 2 acres or more, when unrelated to agriculture, forestry, resource land use or public or semi-public use, are inconsistent and should not be allowed." The proposed development may be compatible with the Agricultural character area, depending on the County's interpretation of "resource land use."

The guidelines for the Conservation character area state that most land uses are not appropriate and that the overarching land use in this area is in a "mostly natural state." Jackson County intends conservation lands to be, "publicly accessible for passive recreational opportunities, particularly when public access is supported by specific policies for public open space acquisition and/or parks and greenway plans." The proposed "Conservation/Recreation Area" is compatible with this character area, as it would preserve the natural landscape and provide public access to outdoor recreation. The remainder of the site plan does not propose any development in the Conservation area, which aligns with the character area's goal. However, the plan states that, "if land development within a conservation area is permitted, it needs to minimize the impact on water quality and the environment." The proposed mining site is located next to this character area, which could negatively impact the area's environmental quality due to dust, noise, and runoff.

The Suburban character area description states that more intense development types are appropriate in this area, including medium density residential, public/institutional, commercial, and master-planned mixed use. A portion of the development, including a scale house and future processing plant area, is shown in the portion of the site designated as a Suburban character area. The Suburban character area summary table lists industrial uses as "generally not anticipated and discouraged; exceptions." Based on this description, heavy industrial land uses like those proposed are generally discouraged within the Agricultural character area, but since exceptions are noted as a possibility, it would be the local government's decision to determine whether an exception would be warranted in this instance.

Compatibility with Future Land Use

The site is mostly identified as Agricultural/Forestry on the County’s Future Land Use Map (dated 12/2/2020), with a small section of the site identified as “Conservation.” The Jackson County Comprehensive Plan describes the Agricultural/Forestry land use as, “much of the land in this category is simply vacant or undeveloped, but other tracts are forested and there may be some raising of livestock or cultivation of crops in this future land use category.” While the proposed site is not designated as Industrial land, it does border parcels that are designated as Industrial on the Future Land Use Map. The proposed “Conservation/Recreation Area” aligns with the designated future land use category, as it would remain undeveloped and dedicated to outdoor recreation. The remainder of the proposed development is not compatible, as heavy industrial operations are not accommodated in this land use category. Extensive vegetated buffering around the mine site is recommended to minimize the project’s potential to visually disrupt the intended rural character of the Agricultural character area.

The Comprehensive Plan describes the Parks/Recreation/Conservation land use as, “lands dedicated to both active and passive recreational uses. These lands may be either publicly or privately owned, and they may include playgrounds, public parks, nature preserves, wildlife management areas, forest preserves, golf courses, recreation centers, or similar uses.” The proposed site plan does not include any development within this land use area, which aligns with the Comprehensive Plan’s intent.

Compatibility with Regional Plan

The site is identified as “Developing” on the Northeast Georgia Regional Plan’s Regional Land Use Map (dated 6/15/2023). The Regional Plan recommends development that:

- Enhances economic mobility and competitiveness
- Elevates public health and equity
- Supports and adds value to existing communities
- Creates housing that is diverse, adequate, equitable, and affordable
- Includes transportation choices and is well-connected with existing and planned transportation options, and
- Protects natural and historic resources.

The following table outlines the proposal’s alignment with these recommendations:

REGIONAL PLAN RECOMMENDATIONS	PROPOSED PROJECT’S COMPATIBILITY WITH RECOMMENDATION
Enhances economic mobility and competitiveness	<p>The applicant states that the regional workforce is not sufficient to meet the demand created by the proposed project.</p> <p>The project would create job opportunities in quarry operations, as well as in related industries such as transportation and construction. The project would also increase the County’s tax revenue and attract investment opportunities.</p>
Elevates public health and equity	<p>Rock quarries pose unique environmental concerns including air, water, and noise pollution. Blasting at the quarry would produce dust that could negatively impact the health of nearby residents. Additionally, the proposed site is located along a section of the North Oconee River. The chemicals and debris generated at the site could affect the water quality for the community downstream.</p>

<p>Supports and adds value to existing communities</p>	<p>Residential areas border the northern and western sides of the proposed site. The quarry would negatively impact these communities by creating noise, debris, dust, and heavy truck volume.</p> <p>The proposed “Conservation/Recreation Area” would add value to the community by providing an outdoor recreation space. However, the quarrying activities on the remainder of the site could detract value from adjacent residential land and contribute to a loss of sense of place. Prior to approval, the applicant should demonstrate that these concerns have been mitigated to the best of their ability.</p> <p>The resources extracted from the quarry would add value to existing communities by providing the raw materials needed for local infrastructure, construction, and road expansion.</p>
<p>Creates housing that is diverse, adequate, equitable, and affordable</p>	<p>The recommendation to create housing is not applicable to this project type.</p> <p>The applicant indicated that this development would not displace any existing uses; however, the Jackson County Tax Assessor’s website shows five detached single-family homes that would be displaced as a result of the project.</p>
<p>Includes transportation choices and is well-connected with existing and planned transportation options</p>	<p>The site plan proposes a right-out exit onto US 441; however, according to the comment submitted by a GDOT District Traffic Engineer, this exit will not be permitted due to limited access to this road (see “Comments from Affected Parties,” below). The developer should determine whether one site exit on Old Highway 441 would be enough to serve the project.</p>
<p>Protects natural and historic resources</p>	<p>The proposal protects natural resources in the designated “Conservation/Recreation Area.” It does not contribute to the protection of natural resources in the remaining project area. Mining has the potential to damage the natural resources located on the site and could negatively affect the water quality and floodplains of the North Oconee River due to chemical and debris runoff. If approved, a thorough management plan should be created in order to mitigate adverse effects to sensitive environmental resources.</p> <p>The site plan proposes a 500- and 2,000-ft buffer around the mining area and a 50-ft buffer around the stream and North Oconee River to mitigate adverse effects.</p>

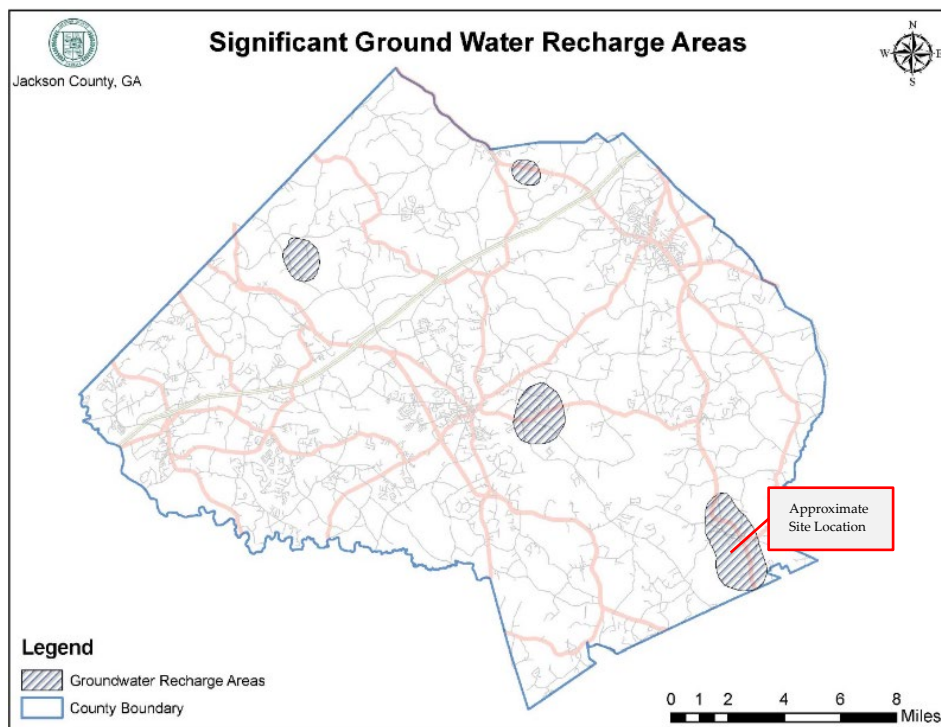
Potential Interjurisdictional Impacts

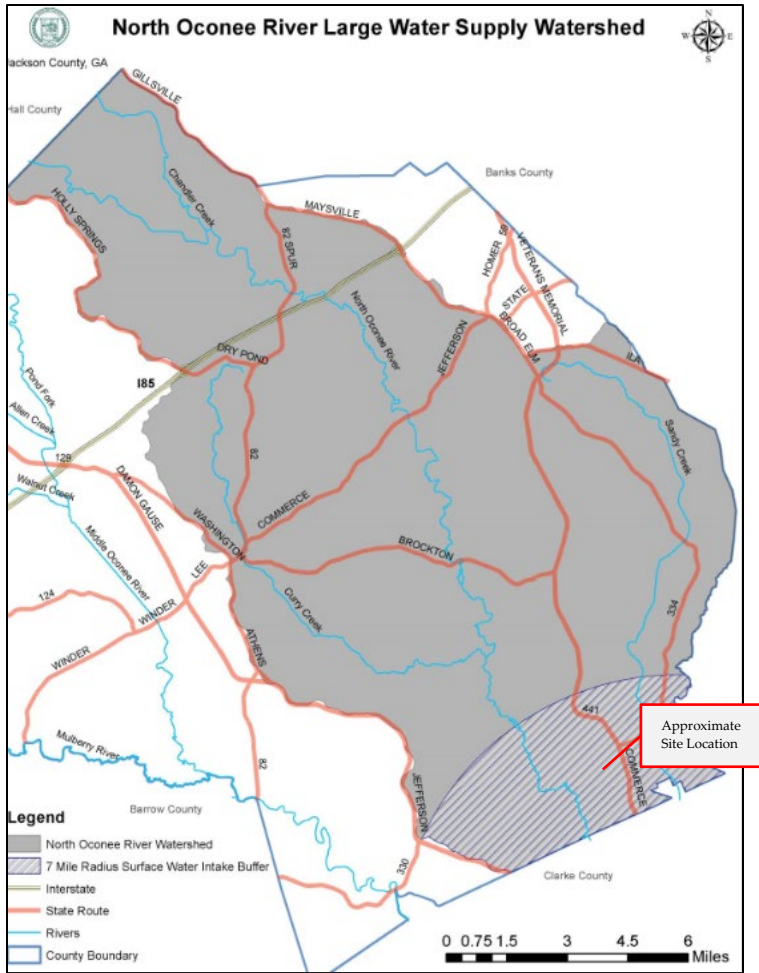
Natural Resources

The development would be located within areas containing wetlands, floodplains, and areas of probable groundwater recharge areas. To minimize disruption to the existing wetlands and floodplains, the applicant plans to allocate a portion of the site for conservation and recreational use. Regarding groundwater recharge areas, the applicant provided a report that analyzes site-specific soil conditions to determine the extent of ground water recharge areas. The applicant states that all quarrying activities will be limited to areas with thin

soil. The applicant acknowledges that all quarrying activities must comply with State and Federal environmental regulations.

The applicant states that the project is unlikely to affect all other environmental quality factors identified on the DRI Additional Form, including water supply watersheds, protected mountain and river corridors, historic resources, and other environmentally sensitive resources. However, the Jackson County Code of Ordinances (dated 11/21/2023) designates the North Oconee River as a protected river and designates the North Oconee River Corridor as an environmental overlay district. The Code of Ordinances also identifies a groundwater recharge area where the proposed site is located in the southeast, shown in the first map below (Jackson County Code of Ordinances). Additionally, as shown in the second map below, the proposed project site is within an area identified in the Jackson County Code of Ordinances as being within seven miles upstream of the North Oconee River surface water intake in Clarke County (approximate site location added to both maps by NEGRC). Refer to the attached site plan and location map for any stream, floodplain, wetland, and buffer locations.





The chart below summarizes the number of acres within the site area as well as within a one-mile buffer around the site that contains 1) wetlands, 2) conservation land, 3) regionally important resources, and 4) threatened regionally important resources. Please refer to the footnotes for definitions for each of these terms.

Wetland, Conservation, and Regionally Important Resources

	AREA TYPE	AREA (ACRES)	PERCENT OF AREA
SITE AREA 877	Wetland Acres ¹	121.0	13.8%
	“Conservation Land” ²	877.0	100%
	Regionally Important Resource Land ³	617.3	70.4%
	Threatened Regionally Important Resource Land ⁴	270.1	30.8%
1 MILE BUFFER AROUND SITE 5157	Wetland Acres	595.5	11.5%
	“Conservation Land”	4,840.0	93.9%
	Regionally Important Resource Land	2,925.5	56.7%
	Threatened Regionally Important Resource Land	1,775.3	34.4%

The North Oconee River is a Regionally Important Resource that forms a portion of the border to the proposed project site. Additionally, the proposed site area is part of the Northeast Georgia Green Infrastructure Network as identified in the Northeast Georgia Resource Management Plan for Regionally Important Resources (dated 8/7/2018). The Northeast Georgia Green Infrastructure Network is intended to serve as a strategically planned and managed network of wilderness, parks, greenways, conservation easements, and working lands with conservation value that benefits wildlife and people, supports native species, maintains natural ecological processes, sustains air and water resources, links urban settings to rural ones, and contributes to the health and quality of life for the communities and citizens sharing this network. The “Conservation/Recreation Area” of the proposal contributes to the intent of this Network. However, the heavy industrial areas of the proposal do not and have the potential to create adverse effects to the North Oconee River.

Transportation

A&R Engineering Inc. completed a traffic impact study that projects 342 new daily trips, including 57 AM peak hour trips and 57 PM peak hour trips from the proposed development. The site plan includes one full-access driveway on Old Highway 441 and one right-out driveway on US 441. As stated in the Comment section below, access to US 441 is limited in this area, so the proposed right-out driveway will not be permitted by the Georgia Department of Transportation.

The traffic study recommends designing the driveway on Old Highway 441 as a two-lane extension of Old Commerce Road, with a westbound left-turn lane off Old Highway 441. There is a Norfolk Southern railroad crossing at this site entrance, and the study recommends making an agreement with the railroad company. The study also recommends hiring a geotechnical engineer to inspect the asphalt on Old Highway 441 and Old Commerce Road to ensure they can handle the truck traffic. Refer to the attached

¹ Wetland acres are derived from the National Wetland Inventory (NWI)

² “Conservation” land is derived from the Northeast Georgia Regional Plan’s Conservation and Development Map (6/15/2023).

³ Regionally Important Resources were identified as a part of the Northeast Georgia Resource Management Plan for Regionally Important Resources (2/15/2018).

⁴ This area represents the intersection between Conservation areas (identified on the Conservation and Development Map, 6/15/2023), adopted Regionally Important Resources (RIR), and “Developed” and “Developing” Regional Land Use areas (identified on the Regional Land Use Map, 6/15/2023).

traffic study for more details and the site plan for the location of proposed infrastructure

Water Supply and Wastewater

The project would be served by a groundwater well on-site and a septic tank. Therefore, the project would not place any new demand on the municipal water and sewer systems, and no water or sewer line extensions are anticipated. The applicant estimates an annual water demand of 5,200 gallons.

Stormwater Management

In addition to the mining area, the applicant estimates that less than 10% of the site would be covered in impervious surfaces, and no stormwater management infrastructure is indicated on the site plan. During the state permitting process, the applicant plans to prepare an Industrial Activities Stormwater Pollution Prevention Plan to mitigate the impacts of stormwater runoff.

The proposal should be designed to minimize disruption to the existing streams, associated wetlands, and floodplains to avoid future erosion, flooding, and degraded water quality onsite and downstream from the site. Low impact design measures, like bioswales, rain gardens, and other green infrastructure should be incorporated into the project design, where applicable. At minimum, the project should be in accordance with the latest edition of the Georgia Stormwater Management Manual (Blue Book) and meet all relevant EPD requirements.

Solid Waste

The applicant estimates the project would generate 150 tons of solid waste annually and that sufficient landfill capacity exists to handle this waste. According to annual tonnage reports from the Georgia Environmental Protection Division, most municipal solid waste (MSW) generated in Jackson County is disposed of in a landfill in Banks County. The applicant states that no hazardous waste would be generated.

Lifecycle Costs and Revenues

The applicant estimates that the project would be worth \$40,000,000 at build-out and generate \$250,000 in annual local taxes. On a per-acre basis, the project would be worth approximately \$44,444 and generate approximately \$277 in tax revenue. Prior to approval, the County should measure the life cycle costs of the infrastructure needed to serve this project to ensure that they would not be committing to more maintenance expenses than the new tax revenue can cover.

Comments from Affected Parties

Jonathan Peevy, P.E., District Traffic Engineer, Georgia Department of Transportation

This site will have to utilize access from Old Hwy 441, existing US 441 is limited access in this area, so access drives will not be permitted.

The intersection of US 441 @ SR 334/Old Hwy 441 will need to be improved (additional turn lanes, signal upgrade).

Projects in the vicinity are active maintenance projects for resurfacing on SR 334.

Kelly Girtz, Mayor, Athens-Clarke County

Comments were submitted on September 26, 2024 which included a letter dated December 2, 2023. Comments are attached.



December 2, 2023

To Whom It May Concern:

I am writing to share the concerns of the Unified Government of Athens-Clarke County (ACCGov) Department of Public Utilities and the Office of Sustainability related to the rock quarry proposed by Vulcan Industries in the South Jackson County area off US441, near the Athens-Clarke County line. According to the information that has been provided to ACCGov officials, the proposed activities include a quarry and an asphalt plant. Even though no specific information has been made available with respect to the projected depth, volume, and material type to be removed by the quarry activity, there are some general concerns as to how Vulcan's proposed project may affect Athens-Clarke County.

Quarry activities require a significant level of water handling, including quarry pit "dewatering," aggregate washing, and dust suppression. Potential impacts from these operations may include water run-off, a significant decrease in groundwater level, reduction in stream/river flow, and loss of wetlands critical to maintaining water quality. Some specific concerns related to potential quarry operations include:

1. Outflow from the proposed quarry will drain directly into the North Oconee River – one of two sources of drinking water for Athens-Clarke County. Water quality of the North Oconee is already of significant concern; on June 20, 2023, the Georgia Department of Natural Resources identified the North Oconee River as "impaired" and established an Upper Oconee Regional Water Plan to help address growing issues with water quantity and quality. Impacts to the North Oconee River could impact permitting and limitations, already established in permit for Athens-Clarke County.
2. The proposed quarry is located on top of one of the few identified ground water recharge areas in our region. Thus, there are concerns related to the quarry's impact on water recharge rates and potential contamination of ground water. Depending on the soil and rock conditions and type of material being extracted, quarry operations may produce heavy metals or other toxic pollutants. Impacts to the ground water recharge area and associated processes may create additional negative consequences to well-owners in Jackson and Athens-Clarke Counties.
3. The site is located less than seven miles from one of Athens-Clarke County's main freshwater intakes, the J. G. Beacham Water Treatment Plant. Currently, it is significantly less expensive to pump and treat water from the North Oconee River than from either the Middle Oconee or the Bear Creek Reservoir. Thus, any decrease in water volume coupled with additional quality degradation of the North Oconee River could substantially increase water treatment costs by requiring a more intensive treatment process along with greater reliance on these more expensive, alternative raw water sources, including those directly used by the Jackson County Water and Sewerage Authority.
4. Athens-Clarke County Public Utilities Department (PUD) recently purchased a quarry near the Ben Epps Airport to ultimately serve as a reservoir to buffer the area against future drought. It is anticipated that PUD will begin filling this reservoir by 2030, using water from the North Oconee River. Thus, a reduction in volume and/or an increase in contaminants could adversely affect this process and thus, delay and add cost for the community's preparedness for future drought events.

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5. Adjacent to the property for the proposed development along the North Oconee River are extensive flood plains and wetlands. These areas act like “kidneys” for water entering the river, mitigating pollutants and enhancing water quality. A drop in water quality from pollutants and/or a decrease in quantity from quarry operations would adversely affect the functioning of these wetlands; this would, in turn, have a significant, negative impact on habitat and wildlife in north Athens-Clarke County.
6. Other concerns include the amount of dust generated from both extraction and on-site transportation via dirt roads and the noise and vibration from quarry operations. With prevailing winds moving from Jackson to Athens-Clarke County, air quality could be adversely affected – including near homes and popular recreation areas such as Sandy Creek Park and Sandy Creek Nature Center. Moreover, Athens-Clarke County has worked hard to maintain compliance with the EPA air quality standards related to particulate matter and ground level ozone. Research indicates that quarry activities may increase particulate matter (PM 2.5 and PM 10) levels in surrounding air quality. Given the limited number of air quality monitors in our region, any air quality violations in Athens-Clarke County may justify the state applying corrective measures for surrounding counties, including Jackson County.
7. The noise and vibrations from the quarry may lower property values, prompt residents to move out of the area, and detract from the quality of enjoyment for nearby residents and patrons using Sandy Creek Park and Sandy Creek Nature Center.
8. The increased number of heavy trucks entering the highway from a single location will likely cause an increase in traffic congestion on the surrounding roadways, especially the Old Jefferson Road/Highway 129 and the 10 loop/US441 interchanges. Community members have already expressed their concern with the current level of traffic congestion in these areas.

Thank you for your time and consideration. I hope that you will consider these concerns with regard to Vulcan Industries’ pursuit of this project. Since this project will likely affect Athens-Clarke County in a number of significant ways, I would appreciate ACCGov being included in future discussion of this project – as appropriate, as the application process moves forward.

I look forward to gaining a greater understanding of this project and to further discussions related to the Vulcan application.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Blaine Williams'.

Blaine Williams
Manager
Unified Government of Athens-Clarke County