

# **Rock Quarry Road**

## **Special Area Plan**

**Adopted by Columbia City Council on October 21, 2002**

**Prepared by Department of Planning and Development**

**City of Columbia, Missouri**

## **INTRODUCTION**

On February 18, 2002 the Columbia City Council directed the Planning and Zoning Commission to develop a plan for the Rock Quarry/Grindstone area to guide future development, particularly regarding land use and transportation issues. In response to this request, the Planning and Zoning Commission discussed the preparation of a Special Area Plan for Rock Quarry Road. The purpose of such a plan would be to help ensure that new development is not detrimental to the established character of the area and contributes to the overall public health, safety and welfare of the community.

The Special Area Plan could be adopted following a public hearing as an amendment to the Metro 2020 Plan. As such, it would serve to guide the decision-making processes of the Planning and Zoning Commission and the City Council when they consider zoning changes, subdivisions, capital improvements, and other development related matters. The plan would set forth goals, policies, and recommendations designed to protect the special character of the area while allowing for orderly, well-planned development appropriate for this portion of the community. The plan could be amended periodically, as needed, due to changing conditions or public wishes. However, it would not have the force of law or be the equivalent of a land use regulation.

## **PLANNING PROCESS**

The planning process consisted of engaging the affected property owners and neighborhood association representatives in a series of open public meetings. The participants reflected a broad diversity of opinion on whether additional growth is desirable, what the type and density of future development should be, and where the proper balance should rest between governmental regulation in the public interest and a land owner's private property rights. Nevertheless, a general consensus appeared to emerge in support of the need for a long-range plan for the area, the overall goals and desired outcome to strive for and the basic framework for the development plan. The following listing shows the date and primary topic of each meeting held:

March 6, 2002	Values and Concerns
April 3, 2002	Goals
May 15, 2002	Alternative Development Scenarios
June 26, 2002	Proposed Development Plan

## **DESCRIPTION OF THE STUDY AREA**

The study area boundaries are as follows: the new state Route AC on the south;

Hinkson and Grindstone Creeks on the north; Old Hwy 63 and the west line of properties fronting on Old 63 on the east; and the Range Line between R12W and R13W on the west. The area encompasses about 507 acres of land consisting of 26

separate tracts comprised of individual and groups of tax parcels under single

ownership. Attachment A contains a brief description of each of the 26 tracts and their current zoning along with a map showing tract boundaries.

At present, the study area is sparsely developed containing approximately 28 existing residential dwellings and one church. The topography is moderate to steeply-sloping. Several intermittent streams tributary to both Hinkson and Grindstone Creeks traverse the area. Much of the area has heavy tree cover with the northern portion more rugged and tree-covered than the southern portion. The northeastern most part is the Grindstone Nature Area. Rock Quarry Road, an unimproved collector street, and Riback Road and Blackberry Lane, both unimproved local residential streets, are the only internal streets serving the area.

## **GOALS**

In order to provide focus to the planning process, the primary goals to be accomplished by the plan need to be enumerated. A goal is a statement of the end result or ultimate outcome toward which an effort is directed. The following goals were refined and adopted by general consensus:

1. Prepare a land use plan for the area, including an appropriate level of residential density, which protects the predominant residential character of the neighborhood and its scenic quality while taking into consideration other compatible uses.
2. Provide for the safe and orderly flow of vehicular traffic through the area while maintaining the scenic quality of Rock Quarry Road and accommodating the needs of the pedestrian and bicyclist.
3. Ensure the availability of adequate public facilities and services including necessary utilities and emergency services.
4. Specify the characteristics that would identify sensitive environmental areas which should be protected.
5. Develop a means for integrating new development with the special characteristics of the neighborhood in order to maintain historic, scenic, and environmental qualities.
6. Maintain a sense of community among existing and new residents and a balance between short-term and long-term residents as development occurs and the area experiences change.

7. Provide an opportunity for land owners to develop their property for reasonable economic purposes consistent with the goals of the plan.
8. Involve property owners and residents in all planning-related activities and make them aware of the social, economic and environmental effects of proposed new development and alternative land use policies.

**PROPOSED DEVELOPMENT PLAN**

The proposed development plan consists of a mixture of land uses of varying intensity, a modestly improved street system and the potential conservation of environmentally-sensitive areas such as low-lying areas, stream corridors and heavily wooded ravines with steep slopes. In the northern part of the study area, land use consists of low density residential (up to 3 dwelling units/acre) and green space conservation areas. The land use intensity increases as one moves southward to an area of medium density residential (up to 6 dwelling units/acre). Properties fronting along the new Route AC are designated commercial, office, high density residential (up to 12 dwelling units/acre) and mixed use, which could be a combination of retail, office and mid to high density residential development. The land along each side of Rock Quarry Road, which represents a “vegetative buffer” within the Scenic Roadway corridor, is shown as green space on the plan. This vegetative buffer has a total width of 166 feet (50 feet of private property on either side of a 66 foot wide right-of way), which is the anticipated ultimate right-of-way for Rock Quarry Road.

**Land Use Summary**

Mixed:	53.1 acres of land or 694,060 square feet of floor area
Commercial:	16.7 acres of land or 218,235 square feet of floor area
Office:	9.1 acres of land or 118,769 square feet of floor area
Low Density Res :	199.9 acres of land or 600 to 900 dwelling units*
Med. Density Res:	19.7 acres of land or 118 dwelling units
High Density Res:	18.9 acres or 227 dwelling units
Open space:	167.5 acres
Roadways:	15.1 acres

\* The range allows for 100 acres of open space to be obtained through donation, easements or density credit. 600 units assumes no density credit and 900 assumes that all private land transferred to open space is obtained through a density credit.

**Transportation**

The only major street improvement proposed is reconstruction of Rock Quarry Road as a neighborhood collector street (30 feet of pavement width with a 5'

sidewalk on one side). An interior local street system, primarily following the high ground, is shown to serve residential areas. A local non-residential street is shown north of and parallel to State Route AC to serve the commercial, office, high density residential, and mixed use areas. This street is shown stubbing to the east boundary of the study area to provide a future connection to Old 63. Street alignments have been positioned to correspond with MoDot-approved access points along State Route AC. The eastward extension of Norman Drive is not shown on the plan due to major topographic constraints. Proposed hiking/biking trails are shown extending westward and northward from two interior streets through the conservation area to connect to Norman Drive and then through Seven Oaks to connect to the existing Hinkson Creek Trail. An adequate pedestrian / bicycle path should be incorporated along the general route of Rock Quarry Road taking into account existing ordinances and topographic features.

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One of the future planning considerations is the volume of traffic on Rock Quarry Road. In 1997, the average daily trips (ADT) on Rock Quarry Road (just north of Riback Road) was 6,643. In 2001, ADT at this location was 7,171. This increase of 528 in four years represents an annual growth rate of about 2%. Nearly all of this increase resulted from causes outside of the study area, i.e. primarily new residential construction south of new Route AC. Projecting this 2% annual growth in external traffic forward 19 years to 2020 results in an additional 2,725 ADT. This increase is likely to occur regardless of whether any new development occurs in the study area.

In order to determine the expected traffic impact of the development plan, a vehicular trip generation rate was applied to the various land uses and the number of acres for each. The resulting trips were then allocated to either new Route AC or Rock Quarry Road. Based on this allocation, the development plan is estimated to produce an increase in internal traffic on Rock Quarry Road of 9,048 ADT. In 2020, the total traffic volume ( existing plus external and internal) on Rock Quarry Road is projected to be 18,944 ADT.

### **Infrastructure**

Sanitary sewers are in place within most, but not all, of the area to allow for the level of development proposed. In the areas not presently served, sanitary sewers will need to be extended by the developer before development can take place. The city has no current plans to upgrade the existing sanitary sewer system in the area.

City water lines are presently very limited in the area. The only city water lines are located: 1) along new State Route AC, east of Rock Quarry Road, 2) along Rock Quarry Road north of new State Route AC for a distance of about 600 feet, 3) at the west edge of the study area on New State Route AC; and, 4) at the west edge of the study area in the Seven Oaks subdivision. There is a short segment of city water line on Rock Quarry Road north of Riback Road. That line is

connected to a substandard rural water district line, however, and will not provide adequate fire flows for new development. Water lines will need to be extended by the developer before development can take place. The city has no current plans to upgrade the existing water system in the area.

## **POLICIES AND RECOMMENDATIONS**

The following policies and recommendations are intended to serve as a guide for making decisions affecting the future development of the area. These statements are closely associated with and supplement the Development Plan map.

### **Residential**

1. Direct residential development only to areas and at densities indicated on the Development Plan.
2. Provide a mixture of housing types with an emphasis on single-family detached dwellings in the low density residential area and single-family attached (townhome style) dwellings in the medium density residential area.
3. Ensure that high density residential development is compatible with surrounding uses, includes landscape buffers to reduce noise, visibility and traffic impacts, and has adequate street and utility capacity.
4. Promote the use of flexible zoning concepts such as residential clustering to protect sensitive environmental features and maintain green space.
5. Encourage the use of planned unit development (PUD) zoning for all new residential development.
6. Maintain a strong neighborhood association to help ensure a safe, attractive and desirable living environment.

## **Commercial / Office**

1. Direct commercial and office development only to areas indicated on the Development Plan.
2. Encourage a mixed-use planned neighborhood center at the intersection of Rock Quarry Road and New Route AC. Development of this area should follow the guidelines for a Neighborhood Commons contained in the Metro 2020 Community Plan. Accordingly, a mix of small-scale compatible uses should be included such as business and professional offices, retail shops and stores, branch banks, churches, day care centers, recreation facilities, and townhomes or apartments. Large-scale retail uses and auto-oriented commercial uses should be excluded.
3. Encourage a planned commercial retail center at the intersection of Green Meadows Road and New Route AC. Development of this area should follow the guidelines for a Neighborhood Marketplace contained in the Metro 2020 Community Plan.

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4. Encourage planned mixed-use or planned business, professional, and medical offices for the remaining areas along New Route AC.
5. Ensure that all commercial retail and office developments are compatible with surrounding uses and include landscape screens and buffers, storm water management, full cut-off light fixtures, monument style signs, and other appropriate site planning techniques to protect adjacent properties.

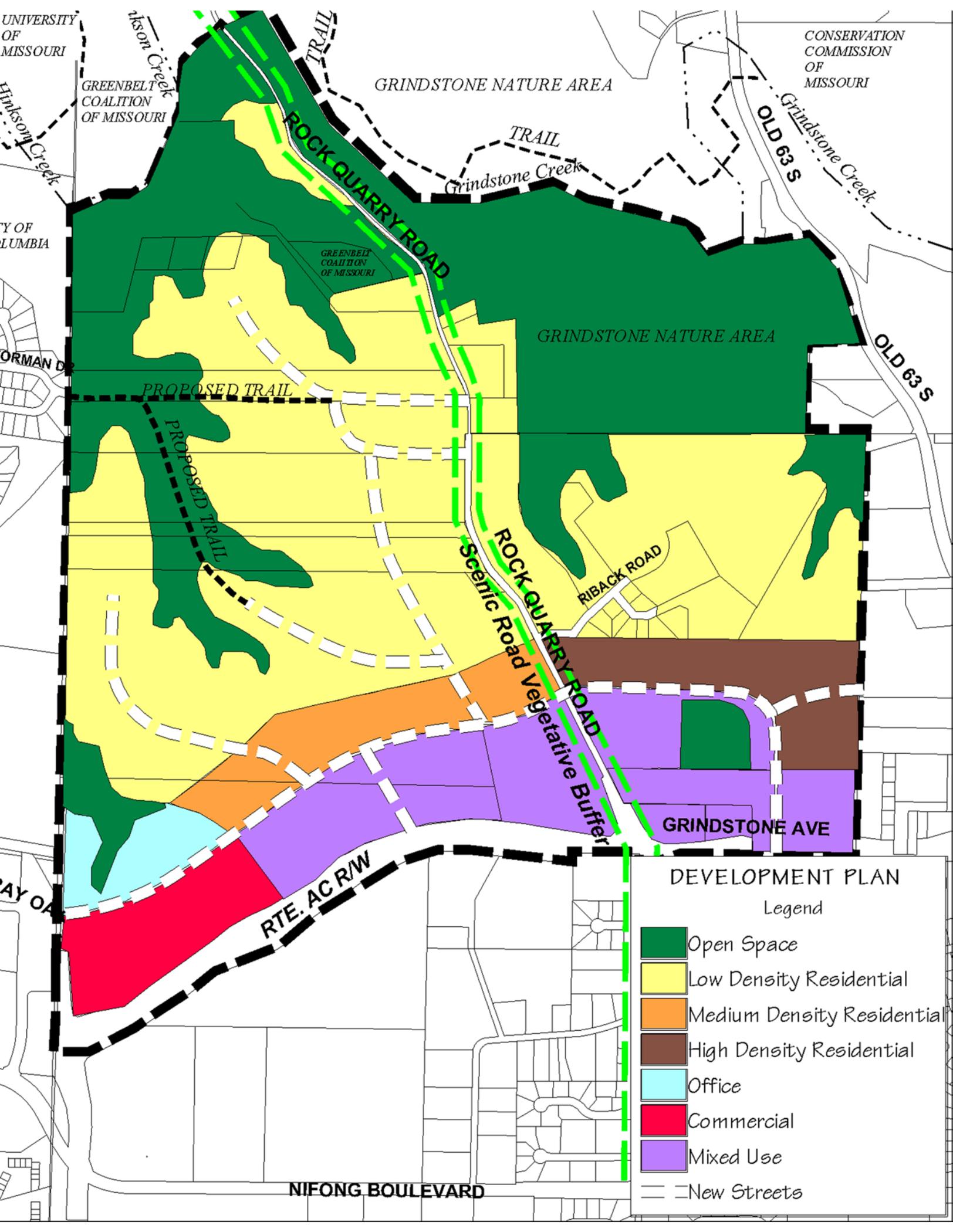
## **Transportation**

1. Prepare a design plan for the improvement of Rock Quarry Road which provides for additional vehicular capacity and safety while minimizing tree removal and other environmental impacts. Use the proposed Neighborhood Collector standard of a 30' wide pavement with a 5' sidewalk on one side as a guide for the design.
2. Limit vehicular access to Rock Quarry Road as much as is reasonably possible. All tracts with frontage on an internal street should take access from that street. In other cases, access should be restricted to one driveway for each 220' of frontage. Existing tracts of record will be allowed one driveway regardless of frontage.

3. Acquire access easements and develop hiking/biking trails as shown on the Development Plan.

### **Environment**

1. Evaluate the scope and effectiveness of the Rock Quarry Scenic Roadway Overlay District. Consider requiring a permit prior to the removal of any trees within the protected vegetative buffer other than for exempt activities.
2. Promote actions to preserve the Green Space Conservation Area shown on the Development Plan. Such actions include purchase by a public or private entity, charitable donation to such an entity, voluntary restriction from development through a conservation easement, or restriction from development by density clustering through planned district zoning.



UNIVERSITY OF MISSOURI  
Hinkson Creek

GREENBELT COALITION OF MISSOURI

GRINDSTONE NATURE AREA

CONSERVATION COMMISSION OF MISSOURI

Y OF LUMBIA

ORMAN D

PROPOSED TRAIL

PROPOSED TRAIL

GREENBELT COALITION OF MISSOURI

GRINDSTONE NATURE AREA

Scenic Road Vegetative Buffer

ROCK QUARRY ROAD

RIBACK ROAD

GRINDSTONE AVE

RTE. AC R/W

AY OA

NIFONG BOULEVARD

DEVELOPMENT PLAN

Legend

- Open Space
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Office
- Commercial
- Mixed Use
- New Streets