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COLLEGE OF ARTS & SCIENCES

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Regarding the Red Mountain Expressway cut

As a professional geologist and professor of geology, the availability of the rock exposures in the Red Mountain Expressway cut have enabled me to conduct research that would not have been possible otherwise and to share the results of my work with students and other professionals around the world, as well as the general public. For example, I have had the opportunity to lead field trips for several different geoscience organizations, including the Geological Society of America, the American Association of Petroleum Geologists, the Gulf Coast Association of Geological Societies, and the Alabama Geological Society. Participants on those trips have included professional geologists and students from across our country, as well as from many other countries internationally. They all came to Alabama to see the cut.

The exposures in the cut make possible the visualization of the results of geologic processes at all scales from the work of a small burrowing organism to the collision of continental plates that produced the Appalachian Mountains. Among the many observations are small reefs that grew on an ancient sea floor, beds of volcanic ash (now altered to clay) from volcanoes along the boundary between colliding plates, and soft-sediment deformation of sand and mud on the sea floor where faults broke upward through the solid rocks below. Of great importance to the city of Birmingham, the cut exposes the iron-ore beds, the mining of which made Birmingham the industrial center of the south. The observations that can be made in the cut lead on to broader concepts in the geology of mountain belts such as the Appalachians.

The scientific importance of the exposures in the cut has been recognized by a number of organizations. The cut is designated as a National Site of Geologic Interest by the American Geosciences Institute and as a National Natural Landmark by the United States Department of

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Interior. In celebration of its centennial, the Geological Society of America published a large set of books on the geology of North America during the 1980s; that project included a set of six books with a selection of 100 significant geological sites for each region of the continent. Each of the selected sites was described as a locality for a field trip stop, so that any user of the book could find the site and have a description of the geology. Denny Bearce and I were asked to prepare a description of the Red Mountain cut for inclusion in the Southeastern Section Centennial Field Guide. The Southeastern Section Centennial Field Guide, which was published in 1986, still is available; and anyone can access the information about the Red Mountain cut. As recently as last fall, a professor at a university in Minnesota contacted me about access to the cut as described in the Field Guide. Unfortunately, the present condition of the cut makes it very difficult for any visitor to get to the exposures that are described. I strongly support the effort to restore access to the cut and to clear the exposures so that the important geological features can be observed.

Thank you,

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