City Council Communication 97-583

December 8, 1997 Agenda

Subject:

Resolution Supporting the

Relocated Iowa 5 Design Concept

Submitted by:

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City Engineer

Synopsis —

Resolution supporting the design concept of the Relocated Iowa 5 project between Iowa 28 and SW 9th Street. Also included is a request that the Iowa Department of Transportation (IDOT) consider several additional items in the final design of this facility.

Fiscal Impact —

N/A

Recommendation —

Approval.

Background —

IDOT has planned for a beltway on the east (Relocated US 65) and south (Relocated Iowa 5) sides of the Des Moines metropolitan area since the 1970s. At the urging of the metropolitan area, the first phases of the overall project were initiated on the east segments of the project (Relocated US 65). Currently, the section from I-80 near the Hubbell Avenue interchange south to University Avenue (Iowa Highway 163) near Pleasant Hill is completed and open to traffic. Additional sections from Pleasant Hill south and west to present US 65/69 just south of the Des Moines City Limits in Warren County are nearly completed and are scheduled to be opened to traffic this month.

On February 18, 1993, the IDOT conducted a Corridor Public Hearing for the Relocated Iowa 5 project from US 65/69 west to I-35. The City reviewed the information presented at the public hearing, and on February 15, 1993, by Roll Call No. 93-515, the City Council supported the project corridor alignment. On April 15, 1996, by Roll Call No. 96-1400, the Des Moines City Council approved the predesign project agreement with IDOT for the design and construction of Relocated Iowa 5 from US 65/69 west to I-35. On July 30, 1996, IDOT held a public hearing on the proposed relocation of Iowa 5 (South Beltway) along the south side of Des Moines between US 65/69 and SW 9th Street. On August 5, 1996, by Roll Call No. 96-2793, the City Council supported the design and construction of Relocated Iowa 5, and encouraged IDOT to expedite the construction of the remainder of this facility west to Iowa 28 and beyond to I-35

On October 30, 1997, IDOT held an Open Forum Public Hearing on the proposed relocation of Iowa 5 from Iowa 28 southeasterly to the proposed SW 9th Street

Interchange. Attached to the roll call is a copy of the Project Statement that was presented to those attending this public hearing. The proposed project provides for the relocation of Iowa 5 in Polk and Warren Counties beginning at Iowa 28 approximately one mile south of Army Post Road and extending east and southeast on new alignment to the proposed SW 9th Street interchange, a total length of 2.7 miles.

A four-lane divided freeway facility is proposed, with interchanges at SW 9th Street and Fleur Drive extended, and a partial interchange at relocated Iowa 28. Bridges would be constructed on County Line Road and on Fleur Drive extended carrying traffic over relocated Iowa 5. In conjunction with the bridge construction, County Line Road would be shifted south to minimize the impacts to the existing mobile home park. The proposed schedule for this section of the Relocated Iowa 5 beltway provides for grading and structures in 1999 and paving in 2000. The beltway is also scheduled to be extended west to I-35 by 2002, including the completion of the interchange at relocated Iowa 28.

City Engineering staff attended the public hearing and has completed a review of the information presented by IDOT. Based on this review, staff supports the design concept as presented by IDOT, and also recommends that several additional items be considered in the final design of this facility, as follows:

- 1. The bridge for County Line Road over Relocated Iowa 5 should be designed and constructed in a manner that will facilitate the construction of, and minimize the cost of, future widening. Because of its strategic location, it is expected that County Line Road will become a four-lane arterial road in the future, and the area around it will be fully developed with an urban character.
- 1. The reverse curves on County Line Road should be designed with maximum superelevation of five to six percent, again to better accommodate future widening of the roadway to an urban four-lane arterial.
- 1. The design of the Iowa 28 interchange, with loop ramps in two quadrants, will not be conducive to pedestrian nor bicycle traffic along Iowa 28. A drainage culvert should be designed and constructed in Relocated Iowa 5 at or east of existing Iowa 28 that could also accommodate a bike/pedestrian connection

between a major employment center north of the beltway and residential development south of County Line Road.

1. IDOT should consider purchasing access control along both sides of the extension of Fleur Drive between the north interchange ramps and County Line Road. There is not sufficient distance between the ramp terminal and a signalized intersection at County Line Road to allow a median opening with complete access. Access to Fleur Drive extended will therefore need to be limited to right-turn-in/right-turn-out, with additional access connections to County Line Road. Predetermined access locations should be established along Fleur Drive extended and made part of the right-of-way acquisition.