

**CITY COUNCIL
COMMUNICATION:**

02-485

AGENDA:

SEPTEMBER 9, 2002

SUBJECT:

SUPPLEMENTAL
AGREEMENT WITH
IDOT FOR 2ND/3RD
INTERCHANGE
RECONSTRUCTION

TYPE:

RESOLUTION

ORDINANCE
RECEIVE/FILE

SUBMITTED BY:

JEB E. BREWER, P.E.
CITY ENGINEER

ITEM76

**OFFICE OF THE CITY MANAGER
CITY OF DES MOINES, IOWA**

SYNOPSIS —

On August 19, 2002 by Roll Call No. 02-2026, Council approved a pre-construction agreement with the Iowa Department of Transportation (IDOT) for the segment of I-235 reconstruction including the 2nd Avenue/3rd Street Interchange and widening of the Des Moines River Bridge. In accordance with this agreement, IDOT will close the 2nd Avenue and 3rd Street bridges and entrance/exit ramps, along with the 5th Avenue bridge. To facilitate early completion of intersection modifications on the 2nd Avenue detour route, IDOT has proposed a supplemental agreement to the pre-construction agreement. Under this supplemental agreement, IDOT will change-order the median modifications into their bridge reconstruction project to ensure that the work is completed in a timely manner before the closing of 2nd Avenue and 3rd Street and implementation of the detour routes.

FISCAL IMPACT —

The reimbursement to IDOT for the median modifications will be funded from the Capital Improvements Program, I-235 Parallel Street Improvements, with \$44,500 of City G. O. bonds, Account 543060, Fund CP038, ENG990000, Project/Grant STR201, Activity ID 06-2003-003.

RECOMMENDATION —

Approve and authorize the Mayor to sign the supplemental agreement with IDOT.

BACKGROUND —

The Iowa Department of Transportation (IDOT) is in the early stages of a multi-year reconstruction of I-235 through Des Moines. On August 31, 2000, by Roll Call No. 00-3634 the City Council approved a pre-design agreement with IDOT for the reconstruction. In addition, on August 19, 2002, by Roll Call No. 02-2026, Council approved a pre-construction agreement with IDOT for the segment of reconstruction including the 2nd Avenue/3rd Street Interchange and widening of the Des Moines River Bridge. In accordance with this agreement, IDOT will close the 2nd Avenue and 3rd Street bridges

and entrance/exit ramps, along with the 5th Avenue bridge.

The closure and reconstruction will be accomplished in stages, with the first stage requiring closure of the 5th Avenue bridge, beginning September 3, for bridge demolition. Beginning September 9, the northbound 2nd Avenue to westbound I-235 entrance ramp will be closed to allow construction of a temporary exit ramp for westbound I-235. The 2nd Avenue and 3rd Street bridges will be closed for demolition and reconstruction approximately September 24.

Closing 2nd Avenue and 3rd Street, and the interchange ramps, will require detouring traffic. Traffic to and from I-235 will be directed to use the 6th Avenue/7th Street interchange, via Grand Avenue, 6th Avenue/7th Street, and University Avenue. Iowa DOT will provide the "Road Closed" and other traffic control signs for the construction, including "trailblazing" signs to I-235 on the detour routes, and will install a temporary traffic signal on 6th Avenue at School Street to facilitate the heavy traffic at this interchange during the reconstruction project.

Iowa DOT and City Engineering Department staffs have analyzed the anticipated traffic conditions on the detour routes to determine if there are traffic signal and other traffic control improvements that can be made to better handle the heavy traffic flows. IDOT's consultant, Snyder and Associates of Ankeny, in conjunction with City traffic engineering staff, has identified signal timing changes at a number of signals along the detour routes. These signal changes will be implemented by City signal personnel.

In addition to the signal timing changes, the detour traffic flow analysis showed that more substantial changes are needed at several intersections, primarily 2nd & University and 6th & University. The very heavy left-turning traffic following the detour route will cause excessive delay and congestion at those two intersections. However, there is sufficient room to develop dual left-turn lanes on University Avenue on the west leg of 2nd Avenue and the east leg of 6th Avenue.

The modification of the medians at these two intersections was bid by the City, with a single bid of \$44,500. The bidding schedule was developed based on IDOT's proposed closure dates. IDOT's bridge contractor requires acceleration of the interchange closure, which will require the median modifications to be completed before the stated completion date in the original City contract. To facilitate early completion, IDOT has proposed a supplemental agreement to the pre-construction agreement whereby IDOT will change-order the median modifications into their bridge reconstruction project to ensure that the work is completed in a timely manner before the closing of 2nd Avenue and 3rd Street and implementation of the detour routes. The City will reject the bids for the median

modification contract and use the allocated funds to reimburse IDOT.

The minor median modifications at 6th Avenue will be temporary, involving the removal of the existing concrete median to allow restriping the pavement for dual left turns. After completion of the interchange work and removal of the detour routes, the median will be replaced to return the intersection to its current configuration. On the west leg of University Avenue at 2nd Avenue, the existing grass median will be modified by paving a second left-turn lane. This paving will remain as a permanent part of the intersection following removal of the detour routes, and will improve the visibility and safety of left turns at the intersection.

Snyder and Associates has designed traffic signal modifications at those two intersections to provide more effective signalization for the dual left-turn lanes. In addition, they have designed a temporary signal for the intersection of University Avenue and Illinois Street, and signal modifications for the intersection of 5th Avenue and Watson Powell Jr. Way. These signal improvements will be accomplished by awarding a contract to the low responsible bidder, KWS, Inc., as a separate item on the September 9 Council agenda. This contract allows 15 working days to complete, and requires the signal work to be coordinated with the median modifications.

The temporary signal at Illinois and University will allow West river Drive from 2nd Avenue to University Avenue to provide an alternate route for northbound traffic on 2nd Avenue, to get to the main post office or to continue north on 2nd Avenue. This signal will be removed following removal of the detour routes. The signal modifications at 5th and Powell Way are necessary for changing 5th Avenue and Powell Way to two-way traffic. These changes were included in the Downtown Traffic Study, adopted by the City Council on July 8, 2002 by Roll Call No. 02-1767. Two-way traffic on these streets will improve traffic flow and access in this area, especially for the new Events Center site. In addition, creation of a northbound lane on 5th Avenue will provide an alternate route for traffic from the Central Business District to get to I-235 eastbound at the 5th Avenue entrance ramp, and will relieve some of the congestion expected on 6th Avenue during the detours. These signal modifications and the two-way traffic will remain in place after the interchange construction is completed and the detour routes are removed.

Completion of the interchange bridges and reopening to traffic will also occur in stages. The 2nd Avenue and 3rd Street bridges, along with the exit ramps and north/south through traffic, are scheduled to be completed and reopen in June 2003. The 2nd Avenue to westbound I-235 entrance ramp is scheduled to reopen in August 2003. The widening of the Des Moines River Bridge will take longer, so the 2nd Avenue to I-235 eastbound entrance ramp is not scheduled to reopen until December 2003. The completion and

	<p>reopening schedule for the interchange has been coordinated with the schedule for the Events Center, which will complete the paving and reopen 3rd Street south of Crocker Street in late 2003. The 5th Avenue bridge will be reconstructed as part of the 6th/7th interchange work in 2004.</p>
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