



Agenda Item:

013

## COUNCIL COMMUNICATION City Manager's Office

### GENERAL INFORMATION

Agenda Date: May 3, 2004  
221

Communication No.: 04-

Agenda Item Type: Resolution

Roll Call No.:

Submitted by: Jeb E. Brewer, P.E., City Engineer

### SUBJECT—

Approving Change Order Nos. 6 and 7 (not to exceed \$249,000 and a contract extension of 92 working days) with The Waldinger Corporation for additional work on Central Business District Traffic Signal Upgrade.

### SYNOPSIS—

Two change orders have been negotiated with The Waldinger Corporation (Tom Koehn, CEO, 2601 Bell Avenue, Des Moines, IA 50321) for additional work on Central Business District Traffic Signal Upgrade. Change Order No. 6 in an amount not to exceed \$249,000 is to compensate the contractor or unanticipated expenses due to extraordinary difficulties during their underground conduit installation operations. Change Order No. 7 is to authorize an extension of the working days by 92 additional days due to the work required as part of Change Order No. 6.

### FISCAL IMPACT—

Funding for these change orders is available in the Capital Improvements Program, Index Code 389346, Account 544150, Fund CP038, Organization ENG990000, Project TFC093 – Signal System Reconstruction – Central Business District (local 20% match is TIF = \$49,800, 80% Federal = \$199,200). With the approval of this change order, the project is still approximately \$13,000 below budget amount.

## **RECOMMENDATION—**

Approval.

## **BACKGROUND—**

On June 9, 2003, by Roll Call No. 03-1359, the City of Des Moines awarded a contract for the Central Business District Traffic Signal Upgrade Project to The Waldinger Corporation for \$1,793,691.70. During the design process, the City attempted to identify all locations where existing building basements protruded into the City's right-of-way in order to avoid conflict with the traffic signal construction. Also, utility company records were obtained to identify locations of existing underground utilities, in order to determine the best routes for the proposed underground conduit installations. The project plans and specifications were developed anticipating that the conduit would be installed by boring under the streets and between blocks throughout the downtown area.

As this construction project has progressed, the contractor has encountered significant difficulties in installing this underground conduit by the planned method of "boring" beneath the pavement. Several items have led to this difficulty. First, the large number of existing utility trenches have created an underground "wall" that is impossible to bore through. This has required the contractor to "open-cut" the streets at a much higher frequency than expected. Second, the existence of unknown basement vaults under the sidewalk has prohibited the contractor from using anticipated construction methods. Third, there have been several locations where older buildings no longer exist, but their abandoned basements were either not removed or unsatisfactory fill material was placed in these basement areas that was unsuitable to allow for boring operations.

These difficulties have required that the contractor change the method of installation to one that involves a much more expensive "open-trench" construction at many of the downtown intersections. To give an indication of the magnitude of this difficulty, there are approximately 38 intersections where boring operations were originally planned on this project. One or more of the above problems have been encountered at 24 of these intersections that were significant enough to require the contractor to change installation methods.

In addition to the monetary amount in Change Order No. 6, the time required to place the conduits by this altered method has been a significant increase over the originally anticipated time. The original contract provided 120 working days to complete the project. An additional 92 days are recommended to be added to the project as Change Order No. 7 in order to complete the work. This time extension is directly the result of the additional difficulties encountered for the items mentioned above.

Change Order No. 6 also includes \$7,000 to reconstruct the traffic signal pole footing on the northeast corner of the 7<sup>th</sup> and Locust intersection. The original construction drawings indicated that a new traffic signal pole was to be installed on an existing pole footing. This footing is integrally part of the roof structure that is above the Ruan Center Underground Parking Garage. At the time that the new pole was being installed, it was discovered that the existing anchor-bolt

base was deteriorated and could not support the new pole. In order to provide a new support base, a small portion of the ceiling structure must be removed and a new base installed.

Change Order No. 6, in the amount of \$249,000.00, and Change Order No. 7, for the addition of 92 working days, have been negotiated with the contractor as fair and appropriate compensation for the additional work that was required. These change orders are funded 20 percent by the City and 80 percent by federal funds through the Iowa Department of Transportation (IDOT). With the approval of Change Order Nos. 6 and 7, the total contract amount is still approximately \$13,000 below the budgeted amount for this major signal construction.