



**CITY COUNCIL
COMMUNICATION:**

ITEM _____

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

99-216

SYNOPSIS -

AGENDA:

MAY 17, 1999

A change order in the amount of \$83,156.80 has been prepared with Hydro-Klean for additional work in conjunction with the Elm and S.W. 7th Streets Sanitary Sewer Cleaning and Televising project. This change order is for the extension of the quantity of Bid Item No. 1, "Cleaning, Sanitary Sewer" at the contract unit price and for the construction of a new manhole.

SUBJECT:

ELM AND SW 7TH
STREETS SANITARY
SEWER CLEANING
AND TELEVISIONING

FISCAL IMPACT -

This change order will be funded from Sewer Revenue Funds from the Capital Improvement Program (CIP) 'Relining Sanitary Trunk Sewers'.

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

RECOMMENDATION -

Approval of Change Order No. 2 with Hydro-Klean.

SUBMITTED BY:

FLOYD BENTZ, P. E.
ACTING CITY
ENGINEER

BACKGROUND -

The sewer being cleaned in this project is a 5 foot diameter two-ring brick sewer that was constructed in 1892. Over the last 110 years, sediment had filled in much of this sewer. During the design phase, it was not possible to make an accurate estimate of the amount of sediment to be removed because the access to this old sewer was limited. Many manholes had been buried over the years with asphalt in the streets and parking lots, and some were buried by the 7th Street viaduct. It was estimated that this sewer was between one-third and one-half full.

The contractor for this project, Hydro-Klean, did the work by having men with shovels inside the sewer loosening the sediment, and a large vacor truck which vacuumed the

sediment into tanks. Each tank was then weighed and trucked to a site southeast of Des Moines, where the sediment was then land-applied as per Iowa Department of Natural Resources procedures. Payment for the work was on a per ton basis.

The men doing the work inside the sewer reported that it was actually three-quarters full of sediment. No additional sewer lines were added to this project, but the extra depth of the sediment in this line caused the actual quantities removed to increase substantially over the estimate.

A new manhole was needed at the upstream end of this 60 inch sewer for access to do the cleaning. The City's records from the 1800's indicate a manhole was constructed at this location. However, after removing a patch in a parking lot and excavating at this location, no manhole was found, requiring the construction of a new manhole at this location.