

**CITY COUNCIL
COMMUNICATION:**

03-369

AGENDA:

JULY 28, 2003

SUBJECT:

WRF DEWATERING
AND THICKENING
SYSTEM—FINAL
DESIGN AND
CONSTRUCTION
PHASE SERVICES
AGREEMENT

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

SUBMITTED BY:

JEB E. BREWER, P.E.
CITY ENGINEER

WILLIAM G. STOWE
PUBLIC WORKS
DIRECTOR

ITEM _____

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

SYNOPSIS —

An agreement Amendment #1 has been negotiated with the engineering firm of Black & Veatch Corporation, a Delaware Corporation (Leonard C. Rodman, C.E.O., 8400 Ward Parkway, P.O. Box 8405, Kansas City, MO 64114) to provide Final Design Phase Services, Bid and Construction Phase Services for the Des Moines Metropolitan Wastewater Reclamation Facility (WRF) Dewatering and Thickening System project. The proposed services are on an hourly basis, with total compensation not to exceed \$1,380,000 for actual costs incurred for direct labor, indirect costs, and other direct costs.

FISCAL IMPACT —

Funding for this project is provided for on page WRA3 of the 2000-01 Capital Improvement Program (CIP), from Repair and Replacement funds, Fund: EN267, Org: PWK99000, Project: WRA 073, Activity ID: 01-2002-013

RECOMMENDATION —

Approval of the proposed Engineering Agreement Amendment #1 with Black & Veatch.

BACKGROUND —

At the October 16, 2001 Wastewater Reclamation Authority (WRA) Management Agency meeting, a final report which included a recommendation to replace the existing belt filter presses, centrifuges and polymer feed system, was adopted and design recommended.

On December 3, 2001, by Roll Call No. 01-3526, the City Council approved an agreement with Black & Veatch Corporation for the preliminary design of the WRF Solids Dewatering project. The preliminary design consisted of onsite testing and evaluation of equipment to be used to replace the existing belt filter presses and centrifuges. The preliminary design has been completed and was received by the WRA in January 2003. The preliminary design recommended the centrifuges be replaced with rotary drum thickeners and the belt filter presses be replaced with more efficient presses.

Now that the preliminary design has been determined to be a feasible solution, the final design must be completed. The final design of the WRF Dewatering System Improvements will include locating three rotary drum

**CITY COUNCIL
COMMUNICATION**

03-369

JULY 28, 2003

PAGE TWO

thickeners and detailing piping modifications, locating four belt filter presses and associated piping with a new belt conveyor system. Heating and ventilation modifications will also be designed. These improvements will require no new facilities being sited as all improvements will be within existing structures. Pre-bid and pre-award services, construction phase services, resident services during construction, and operation and maintenance manual/personnel training and startup services are also included in this amendment.

Implementation of these improvements will result in operational savings by decreasing transportation costs for the biosolids and reducing electrical costs through replacement of the centrifuges.

