

City of Grand Island

Tuesday, May 25, 2004 Council Session

Item G12

#2004-122 - Approving Preliminary Feasibility Study to Intercept VOC Groundwater Contamination - Southwest Grand Island

Staff Contact: Gary R. Mader

City of Grand Island City Council

Council Agenda Memo

From: Gary R. Mader, Utilities Director

Meeting: May 25, 2004

Subject: Preliminary Feasibility Study to Intercept VOC

Groundwater Contamination

Item #'s: G-12

Presente r(s): Gary R. Mader, Utilities Director

Background

The contamination plume of Volatile Organic Compounds (VOCs) discovered last year in the southwest area of the City remains in the groundwater and will continue to move with the groundwater flow. As a result of water and soil sampling by the City, NDEQ, and EPA, the boundaries of the contamination plume are generally known, and from that data it appears that three large municipal wells in the Parkview area are at risk of being contaminated by movement of the VOC contamination in a relatively short time frame. One municipal well in the area has already been abandoned due to the VOC contamination.

Discussion

Utilities Staff has discussed the possibility of installing a pumping system at the leading edge of the contamination plume to intercept the plume before it migrates to the remaining wells. But the Department does not have the computer systems or personnel to adequately assess the feasibility of such a system. Several years ago, a local engineering firm, Olsson Associates, developed a computer model of groundwater movement in several areas of the City, including Parkview, to evaluate dewatering to protect basements from high groundwater levels. That model would be useful, and is readily available, to take a first look at the feasibility of building a system to mechanically intercept the leading edge of the recently discovered VOC contamination plume. This preliminary feasibility study would use the existing model, modified for this project using existing data from the Utilities Department, NDEQ, and the Conservation and Survey Division to evaluate the feasibility of the plume intercept system.

It is not anticipated that this "first look" will provide firm answers. But it is hoped that we will develop direction to follow and have a much better feel for the feasibility and cost of such a system.

Olsson Associates has provided a service contract for this Feasibility Study with a not to exceed price of \$7,500 for work authorized at this time.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

- 1. Approve the award of the Feasibility Study contract to Olsson Associates.
- 2. Deny the contract award.
- 3. Modify the contract to meet the wishes of the Council.
- 4. Table the issue.

Recommendation

City Administration recommends that the Council approve award of the contract for the Preliminary Feasibility Study to Olsson Associates of Grand Island, Nebraska in an amount not to exceed \$7,500.

Sample Motion

I move to approve the award of the contract for the Preliminary Feasibility Study for Contamination Plume Intercept to Olsson Associates.

RESOLUTION 2004-122

WHEREAS, the City of Grand Island discovered last year a contamination plume of Volatile Organic Compounds (VOC) in the southwest area of the City; and

WHEREAS, as a result of water and soil sampling by the City, Nebraska Department of Environmental Quality and the Environmental Protection Agency, the boundaries of the contamination plume are generally known, and from that data it appears that three large municipal wells in the Parkview area are at risk of being contaminated by movement of the VOC contamination in a relatively short time frame; and

WHEREAS, it is vital that such contamination be intercepted before it migrates into the remaining municipal wells; and

WHEREAS, Olsson Associates of Grand Island, Nebraska, has developed a computer model of groundwater movement to evaluate dewatering to protect basement from high groundwater levels; and

WHEREAS, such computer model would be useful to determine the feasibility of building a system to mechanically intercept the leading edge of the VOC contamination plume; and

WHEREAS, the preliminary feasibility study would use the existing computer model, modified for this project using existing data from the Utilities Department, the Nebraska Department of Environmental Quality and the Conservation and Survey Division to evaluate the feasibility of the plume intercept system; and

WHEREAS, Olsson Associates has provided a service contract for this Feasibility Study for a not to exceed price of \$7,500 for work authorized at this time.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that Olsson Associates of Grand Island, Nebraska, is hereby authorized and approved to provide a Preliminary Feasibility Study for Contamination Plume Incept for an amount not to exceed \$7,500.

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Adopted by the City Council of the City of Grand Island, Nebraska, May 25, 2004.

RaNae Edwards, City Clerk

Approved as to Form ¤ _____ May 19, 2004 ¤ City Attorney