

**CITY COUNCIL  
COMMUNICATION:**

**ITEM \_\_\_\_\_**

**02-301**

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

**AGENDA:**

JUNE 3, 2002

**SYNOPSIS -**

Easton Boulevard Detention Basin Master Plan approval; authorization for additional property acquisition; and approval of Supplemental Agreement No. 2 with Snyder and Associates, Inc., (Stephen P. Rowe, President, 501 S.W. Oralabor Road, Ankeny, Iowa 50021-0974) for design and property acquisition services.

**SUBJECT:**

MASTER PLAN,  
AUTHORIZATION  
FOR PROPERTY  
ACQUISITION, AND  
SUPPLEMENTAL  
AGREEMENT NO. 2.  
FOR EASTON  
BOULEVARD  
DETENTION BASIN

**FISCAL IMPACT -**

Compensation to the consultant is not to exceed \$56,446. Additional property acquisition is estimated to be \$168,300. Funds are provided for in the 2001-02/2006-07 Capital Improvements Program-Storm Sewer Improvements - Page 12, Index Code 366567, Fund EN304, Org. ENG990000, Project STE065, Activity ID 01-2002-008.

**TYPE:**

**RECOMMENDATION -**

**Approval.**

**RESOLUTION  
ORDINANCE  
RECEIVE/FILE**

**BACKGROUND -**

**SUBMITTED BY:**

WILLIAM G. STOWE  
PUBLIC WORKS  
DIRECTOR

In January of 1997, the City Council approved the 7th Ward Ditch (now known as Leetown Creekway) Flood Control Study prepared by Snyder & Associates. This study recommended that the existing wooden box between East University Avenue and Easton Boulevard be replaced and that a stormwater detention basin be constructed south of Easton Boulevard.

JEB E. BREWER, P.E.  
CITY ENGINEER

During said study, the residents and neighborhood associations impacted by this watershed provided valuable input and were involved in identifying solutions to the flooding problems. In anticipation of the construction of the detention basin, the property for the original basin site was acquired during 1998.

In October of 1999, an agreement with Snyder & Associates was approved by the City Council for the conceptual design and master plan of the detention basin. During the study phase, the residents and neighborhood associations expressed a strong interest in having input into the design of the detention basin. A committee was formed to provide input on the desired elements and features to be included in the master plan.

The committee included representatives from the ACCENT Neighborhood, Stormwater Utility, Traffic and Transportation, Park and Recreation, and Community Development. The committee met for over a year and developed a master plan for the detention basin that was approved by the City Council on January 22, 2001, by Roll Call No. 01-042.

On September 10, 2001, by Roll Call No. 01-2675, the City Council entered into an agreement with Snyder & Associates, Inc. for final design and property acquisition for the detention basin. Because of their extensive involvement in the study and planning for this detention basin, Snyder & Associates was selected to perform the final design. A geotechnical investigation of the basin site was included in the final design. The soil borings performed as part of the geotechnical investigation revealed extensive sand deposits underlying the basin site. The geotechnical subconsultant recommended that a pump test be conducted to determine the properties of this sand layer.

Since a pump test was not included in the original scope of services, Supplemental Agreement No. 1 was negotiated to provide a pump test. The test provided information on the recharge and average hydraulic conductivity of the aquifer. Based on the pump test results, a system for handling the groundwater contained in the sand layer was proposed as one alternative for the detention basin design.

The original Master Plan approved by City Council (identified as "May 2000") is shown on the proposed revised Master Plan (dated May 2002 and attached to the Roll Call) included construction of a 279,000-square-foot detention basin approximately 23 feet deep, along with associated grading and landscaping. The significant capital, operation, maintenance and replacement costs required for continuous dewatering of the sand layer for the original basin design resulted in an evaluation of alternative basin layouts. The alternative basin layouts were coordinated with the ACCENT Neighborhood Association and affected adjoining property owners.

The proposed revised detention basin Master Plan, dated May 2002, includes a larger, shallower basin (397,000-square-foot basin

approximately 15 feet deep), along with associated grading and landscaping. The larger area for the recommended basin will require acquisition of one additional property with an estimated cost of \$168,300 for the parcel located north of the original basin and south of Easton Boulevard. The variable costs for the proposed basin are approximately \$360,000 less than the variable costs of the original basin.

This proposed basin layout is the most economical, results in no dewatering of the sand layer, and is preferred by the ACCENT Neighborhood Association (see letter of support attached to the Roll Call). This proposed basin layout requires that the new Master Plan be approved, additional property be acquired, and additional professional services be approved.

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