



CITY OF MARTINEZ

**CITY COUNCIL AGENDA
July 24, 2012**

TO: Mayor and City Council
FROM: Tim Tucker, City Engineer
SUBJECT: Water System Hydraulic Model
DATE: July 15, 2013

RECOMMENDATION:

Adopt a resolution authorizing the City Manager to execute an agreement in an amount of \$90,824 for consultant services with Psomas for developing a hydraulic model of the City's water system.

BACKGROUND:

Psomas recently completed developing a geographical information system (GIS) of the City's water system. The GIS model will be used as the basis for developing the hydraulic model of the water system.

The services provided by Psomas include using the City's GIS to add pertinent data to represent pump station system curves, pressure reducing/sustaining valve settings and other hydraulic operational information. The existing system water demands will then be obtained from meter read data and loaded to the appropriate node within the model. The hydraulic model will then be calibrated using fire flow and pressure data from throughout the system. Finally, simulations of various scenarios representing peak, average, low flow, maximum demand, and peak hour conditions can be run to observe the system's performance. System reliability can be tested to see what happens under certain emergency conditions such as power failures, pump failures, etc. The hydraulic model will then be available to the City to analyze future conditions for proposed new developments to determine the impacts on the existing water distribution system and to test various operational schemes.

The project is scheduled to be completed by the summer of 2014.

FISCAL IMPACT:

The project was included in the recently adopted 2013/14 and 2014/15 biennial budget. The project is budgeted under Account No. C7038 and is funded with Water System funds.

ACTION:

Adopt a resolution authorizing the City Manager to execute an agreement for consultant services in an amount of \$90,824 with Psomas for developing a hydraulic model of City's water system.

Attachment:
Resolution

APPROVED BY:



City Manager

RESOLUTION NO. -13

**AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT FOR
CONSULTANT SERVICES IN AN AMOUNT OF \$90,824 WITH PSOMAS
FOR DEVELOPING A HYDRAULIC MODEL OF THE CITY'S WATER SYSTEM**

WHEREAS, the City Council of the City of Martinez approved the Water System Hydraulic Model Development Project with the adoption of the Five Year Capital Improvement Program (2013-18) and 2013-14 Biennial Budget; and

WHEREAS, Psomas has recently developed the City's Geographical Information System (GIS) model for the City's Water System; and

WHEREAS, the hydraulic model will be based on the GIS model; and

WHEREAS, the Psomas has the expertise and qualifications to provide the necessary consultant services.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Martinez, that the City Manager is authorized to execute an agreement for consultant services with Psomas for Developing a Hydraulic Model of the City's Water System subject to review of the agreement by the City Attorney.

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I HEREBY CERTIFY that the foregoing is a true and correct copy of a resolution duly adopted by the City Council of the City of Martinez at an Adjourned Regular Meeting of said Council held on the 24th day of July, 2013, by the following vote:

AYES:

NOES:

ABSENT:

RICHARD G. HERNANDEZ, CITY CLERK
CITY OF MARTINEZ