



## THE CITY OF KEY WEST

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**TO:** Jim Scholl, City Manager

**Cc:** E. David Fernandez, Asst. City Manager – Operations  
Mark Finigan, Asst. City Manager - Administration

**FROM:** Doug Bradshaw, Senior project Manager

**DATE:** March 30, 2011

**SUBJECT:** Pavement assessment of City of Key West owned roads and development of a pavement management system by CH2M Hill.

**ACTION STATEMENT:**

This request is to approve Task Order # 5-11 FAC in the Amount of \$82,312 from CH2M HILL to furnish general engineering services to the City of Key West to perform a pavement assessment of City of Key West owned roads, development of a pavement management system to be used for a roadway capital improvement plan and approval of a transfer from account 102-4102-541-9400: Reserves for Paving to fund the \$12,312 budget shortfall.

**BACKGROUND:**

The City of Key West (CITY) owns approximately 100 miles of paved streets. With estimated costs of \$520,681 per mile for milling and resurfacing costs and at \$2,549,139 per mile for new construction. , the City has a substantial investment in its paved roadway structures. Preservation of existing street systems is a priority for all levels of government. Funds designated for street maintenance and rehabilitation are typically in short supply and must be used as effectively as possible. One proven method to obtain maximum value of available funding for street preservation is through the use of a pavement management system.

Pavement management is the process of planning, budgeting, funding, designing, constructing, monitoring, evaluation, maintaining, and rehabilitating the pavement network to provide maximum benefits for available funds. A pavement management system is a set of tools or methods that assists decision makers in finding optimum strategies for providing and maintaining pavement in a serviceable condition over a given time period. A properly implemented paving program enables a city to apply appropriate pavement surface treatments to with the goal of bringing the streets to an acceptable level using reasonable operational costs. Having a prioritized plan assists in advance planning, is necessary to obtain FDOT funding, provides capital planning tools for the City's budget, and helps coordination with other utility projects to avoid

disturbing newly paved streets.

The project includes verifying all streets in the City's network, conducting pavement condition surveys on each street to develop a pavement condition rating, and preparing a report including all the data and recommendations for implementing pavement management strategies based funding levels designated by the City.

The pavement condition survey will be performed by Infrastructure Management Services (see attached). With their technology that are able to collect data on the City's roadways including surface distress, roughness, cracking, rutting, grade, etc. That raw data (example attached) will then be analyzed by CH2M Hill in order to prepare the pavement management system.

**PURPOSE & JUSTIFICATION:**

The pavement management system will allow the City to develop a budgetary and scheduling plan to repair and pave the City owned streets.

**OPTIONS:**

1. Approve the Engineering Services Task Order # 5-11 FAC under the general engineering services agreement in the Amount of \$82,312 from CH2M Hill Engineering Services to perform a pavement assessment of City of Key West owned roads, development of a pavement management system and approval of a transfer from 102-4102-541-9400: Reserves for Paving to fund the \$12,312 budget shortfall.
2. Disapprove the task order.

The advantage of option 1 is it allows the City to begin the process of improving the roadway system within the City. Road surfaces within the City range from good to extremely poor and a clearly defined pavement management program is an essential component to this process. By not approving the task order under the City's general engineering services agreement with CH2M Hill would delay the process as the project would have to go through the full bid process. City Staff feels that CH2M Hill is very well qualified to perform the task.

**FINANCIAL IMPACT:**

Total amount is not to exceed \$82,312. Currently 102-4102-541-3100 has \$70,000 budgeted toward the project. \$12,312 will need to be transferred from 102-4102-541-9400: Reserves for Paving to cover the shortfall.

**RECOMMENDATION:**

City staff recommends option # 1: Approval of the Engineering Services Task Order # 5-11 FAC under the general engineering services agreement in the Amount of \$82,312 from CH2M Hill Engineering Services to perform a pavement assessment of City of Key West owned roads, development of a pavement management system and approval of a transfer from 102-4102-541-9400: Reserves for Paving to fund the \$12,312 budget shortfall.