RESOLUTION NO. 14-13

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CASTLE PINES, COLORADO APPROVING A LETTER AGREEMENT WITH MERRICK & COMPANY FOR PAVEMENT EVALUATION AND MAINTENANCE PROGRAM PLANNING TO THE CITY OF CASTLE PINES

WHEREAS, the City of Castle Pines ("City") is authorized to enter into contracts for the performance of general municipal governance and services; and

WHEREAS, the City has previously entered into a Professional Services Agreement (the "Agreement") with Merrick & Company (the "Merrick") to provide the City with on-call public works and engineering services provided on an as-needed basis (the "Services"); and

WHEREAS, the Agreement was approved by Resolution No. 11-39; and

WHEREAS, Section 1.2 of the Agreement authorizes the City to authorize Merrick to provide additional services; and

WHEREAS, City Council desires to authorize Merrick to provide services related to a pavement evaluation and maintenance program planning to the City ("Pavement Services") in accordance with the terms and conditions of the attached letter agreement; and

WHEREAS, total compensation to be paid to the Merrick for the Pavement Services shall not exceed Fifty Five Thousand Dollars (\$55,000.00).

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CASTLE PINES, COLORADO, THAT:

<u>Section 1</u>. The City Council hereby (a) approves the Pavement Services to be performed by Merrick and (b) authorizes the City Manager to execute the attached letter agreement.

<u>Section 2</u>. If any section, paragraph, clause or provision of this Resolution shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining issues of this Resolution.

Section 3. Effective Date. This Resolution shall take effect upon its approval by the City Council.

INTRODUCED, READ AND ADOPTED AT A REGULAR MEETING OF THE CITY COUNCIL OF THE CITY OF CASTLE PINES by a vote of 5 in favor, 0 against this 13^{th} day of May, 2014.

Jeffrey T. Huff, Mayor

ATTEST:

APPROVED AS TO FORM:

Diane Spomer, CMC, City Clerk

lichor

Linda C. Michow, City Attorney

EXHIBIT A



May 6, 2014

Mr. Michael J. Martin Merrick & Company 2450 South Peoria Street Aurora, Colorado 80014

RE: Pavement Management Plan; Additional Services

Dear Mr. Martin:

The City of Castle Pines and Merrick & Company ("Merrick") desire to enter into this letter agreement pursuant to Section 1.2 of the professional services agreement dated July 1, 2011 between the parties ("Agreement") to authorize Merrick to perform additional services as set forth in the attached Exhibit A, Scope of Services.

As set forth in Section 1.2 of the Agreement, the City Manager may authorize additional services as approved in writing, subject to approval by City Council for increases in compensation. The City Council has authorized Merrick to provide additional services as described in Exhibit A in a not to exceed amount of \$55,000.00.

This letter agreement authorizes Merrick to perform additional services as described herein; total compensation paid to Merrick under this letter agreement not to exceed Fifty Five Thousand Dollars (\$55,000.00).

Services shall be performed in accordance with all terms and conditions of the Agreement. To acknowledge Merrick's acceptance, please execute where indicated, and return an executed copy of this letter to the City Clerk.

Sincerely,

Don Van Wormer City Manager

Enclosure (Exhibit A)

cc: Jeffrey T. Huff, Mayor Diane Spomer, City Clerk Linda Michow, City Attorney

ACKNOWLEDGED AND AGREED:

CONSULTANT: MERRICK & COMPANY, a Colorado corporation

BY: Michael J. Martin, P.E., Project Manager

DATE: May 29, 2014

Exhibit A Scope of Services

CITY OF CASTLE PINES PAVEMENT EVALUATION AND MAINTENANCE PROGRAM PLANNING SCOPE OF SERVICES

Paving Evaluation and Maintenance Programming

The following tasks are proposed for the long term planning of the Pavement Evaluation and Maintenance Program.

- I. Task 1: Establish Existing Conditions
 - The City shall purchase, at its sole cost and expense, the US Army Corps of Engineers MicroPaver 6.5 Software ("PAVER") for the on-going evaluation and maintenance programming for all public streets within its corporate limits. Merrick will assist the City by providing technical and engineering assistance with the PAVER program in the following areas:
 - A. Present an overview of the PAVER system upon request by the City.
 - B. The City will provide all available information regarding the condition, lengths, original construction dates, major repair dates, and the related costs/expenditures for the City's public streets that is readily retrievable from the City records.
 - C. Merrick shall enter all existing and available data provided by the City into the PAVER program, set up a database of roadway Networks/Branches/Sectoins and provide that existing database to the City for its record.
- II. Task 2: Field Inspections and Data Entry Merrick shall provide the following under this Task:
 - A. Conduct a half day office training on the PAVER software and on the job pavement inspection training. Training will be conducted in accordance with PAVER criteria for both asphalt and concrete pavements.
 - B. Inspect all City owned asphalt and concrete streets in order to generate a current Pavement Condition Index (PCI). Field Inspections will be conducted in accordance with ASTM D6433-07.
 - C. All data collected in the field will be input into the PAVER program.
 - D. After review/discussion with City Staff, Merrick will generate reports to present the current conditions of the City's pavements.
- III. Task 1C: Budgeting and Maintenance Planning Merrick shall provide the following under this Task:
 - A. Generate prediction models based upon City construction cost data and appropriate indexes (called family curves) for use in predicting the future condition of the pavements.
 - B. Work with City staff to develop maintenance strategies and costs for items such as crack filling, patching, slurry seals, over-lays, partial or full reconstruction. The maintenance strategies will be based upon the City's preferred capital improvement maintenance approach for those strategies specified herein.
 - C. Evaluate capital improvement maintenance budgets. This item will include the impact on the pavement condition with various budget levels. Budget projections will

be limited to not more than three typical scenarios, i.e., a limited budget, variable budget, backlog elimination or condition stabilization. Each budget will be presented along with the predicted impact on the future pavement condition.

- D. Merrick will develop a preliminary 5 year planning and 10 year Report based upon the information and data developed in association with the implementation of the PAVER software. The preliminary Report shall include recommendations for a maximum of two financially constrained budget values (as determined by the City). The preliminary written Report shall be used to determine the top priorities for the 2015 and 2016 annual paving programs.
- E. Geotechnical core borings (up to a maximum of 30) on the existing pavement on the top priority streets shall be taken and a geotechnical report will be provided to City staff. This report shall be used to develop the pavement rehabilitation design that is recommended for each street. The location and number of borings shall be coordinated and approved in advance by the City. This work will be completed via a sub-consultant to Merrick.
- F. Upon completion of the 2014 Paving Program, Merrick shall update the statistical records for those streets that were completed in 2014.
- G. The Final Report shall provide information and street improvement priorities to maintain the average condition of all public streets to a Pavement Condition Index (PCI) determined by the City (for example a PCI of 80) or other value (PAVER definition) approved and established as an accepted standard for the City.
- H. Following the completion of the Geotechnical Report, the Final Report estimates and recommendations shall be refined to reflect the required pavement design or rehabilitation method proposed on the 2015 and 2016 Paving Program. The Final Report shall include recommendations for a maximum of two financially constrained annual budget values (as determined by the City).

City Responsibilities: The City will purchase, at its sole cost and expense, the US Army Corps of Engineers MicroPaver 6.5 Software ("PAVER") for the on-going evaluation and maintenance programming for all public streets within its corporate limits. The City shall provide Merrick with all previous and current databases and spreadsheets related to the City's street network. The City shall spend time meeting with the Merrick Team to review the outcomes of the field inspections and to provide guidance as to the different budgeting models utilized in the final report (Reduce, Maintain and Increase funding models).

Merrick Responsibilities: Merrick will provide all of the services outlined in the scope above.

Deliverables: Merrick's deliverables will include:

- MicroPaver Database of all City owned streets based in Summer 2014 Inspections
- Preliminary Pavement Management Plan
- Geotechnical Report for top priority streets (2015 & 2016)
- Final Pavement Management Plan This plan will develop the pavement management program for future annual street improvement projects within the City and will be based on a pre-determined (as determined during the process between City Staff and the Merrick Team) budgeting models. These models, in general, will include a reduced funding

scenario; a maintain the current funding scenario; and an increased funding scenario to maintain City streets to an average Pavement Condition Index as determined by the City.

Schedule: The following provides a milestone schedule for the Pavement Evaluation and Maintenance Program task:

- NTP / Signed Task Order from City
- Field Surveys and Data Entry
- Preliminary Report to City
- Review with City Staff
- Final Report

Additional Services:

Following delivery of the final Report covering the 2015 to 2025 year budgeting and planning period, Merrick will continue to provide support service on a time and material basis at thencurrent hourly rates for the development of alternative programs or development of various scenarios that the City may choose to consider.

Assumptions and Clarifications:

- a. This proposal is based upon the total of 32.8 centerline miles of City maintained streets within its corporate limits.
- b. The City's acquisition of PAVER software.

May 2014 June 2014 July 2014 August 2014 September 2014