SEVENTH AMENDATORY AGREEMENT

THIS SEVENTH AMENDATORY AGREEMENT (this "Amendatory Agreement") is made and entered into by and between the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado (the "City"), and DEIGHTON ASSOCIATES LTD., a foreign corporation, whose address is 1555 Wentworth St., Unit B, Whitby, ON L1N 9T6, Ontario, Canada (the "Consultant" and referred to herein, together with the City, as the "Parties").

RECITALS

A. The Parties entered into an Agreement, dated April 20, 2016, an Amendatory Agreement, dated April 27, 2017, a Second Amendatory Agreement, dated April 4, 2018, a Third Amendatory Agreement, dated April 2, 2019, and a Fourth Amendatory Agreement, dated June 21, 2020, a Fifth Amendatory Agreement, dated July 20, 2021, AND A Sixth Amendatory Agreement, dated July 18, 2022 (collectively, the "Agreement") for the continued refinement and enhancement of the CCD Transportation Asset Management System.

B. The Parties wish to amend the Agreement to modify the Scope of Work, extend the Term, and increase compensation to the Consultant.

NOW, THEREFORE, the parties hereby amend the Agreement as follows:

1. All references to "Exhibit A, A-1, A-2, A-3, A-4, and/or A-5" in the existing Agreement shall be amended to read: "Exhibit A, Exhibit A-1, Exhibit A-2, Exhibit A-3, Exhibit A-4, Exhibit A-5, Exhibit A-6, and Exhibit A-7, as applicable." The Scope of Work marked as Exhibit A-7 is attached hereto and incorporated herein by this reference.

2 Article 3 of the Agreement entitled "**TERM**" is hereby amended to read as follows:

"3. <u>TERM</u>: The Agreement will commence on January 1, 2016, and will expire on June 30, 2024 (the "Term")."

3. Article 4(a) of the Agreement entitled "**FEE**" is amended to read as follows:

"a. Fee: The City shall pay, and the Consultant shall accept as the sole compensation for services rendered and costs incurred under the Agreement the amount of TWO MILLION THREE HUNDRED EIGHTY-SIX THOUSAND FIVE HUNDRED TWENTY-FOUR DOLLARS AND 23/100 CENTS (\$2,386,524.23) for fees. Amounts billed may not exceed the rates set forth in Exhibit A."

4. Article 4 (d-1) of the Agreement entitled "MAXIMUM CONTRACT AMOUNT" is amended to read as follows:

"d. <u>Maximum Contract Amount</u>

(1) Notwithstanding any other provision of the Agreement, the City's maximum payment obligation will not exceed TWO MILLION THREE HUNDRED EIGHTY-SIX THOUSAND FIVE HUNDRED TWENTY-FOUR DOLLARS AND 23/100 CENTS (\$2,386,524.23) (the "Maximum Contract Amount"). The City is not obligated to execute an Agreement or any amendments for any further services, including any services performed by Consultant beyond that specifically described in Exhibit A. Any services performed beyond those in Exhibit A are performed at Consultant's risk and without authorization under the Agreement."

5 Except as herein amended, the Agreement is affirmed and ratified in each and every particular.

6 This Amendatory Agreement will not be effective or binding on the City until it has been fully executed by all required signatories of the City and County of Denver, and if required by Charter, approved by the City Council.

[SIGNATURE PAGES FOLLOW]

Contract Control Number:	DOTI-202367671-07 (201627262-07)
Contractor Name:	DEIGHTON ASSOCIATES LTD.

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of:

SEAL

CITY AND COUNTY OF DENVER:

REGISTERED AND COUNTERSIGNED:

ATTEST:

By:

APPROVED AS TO FORM:

Attorney for the City and County of Denver

By:

By:

By:

Contract Control Number: Contractor Name:

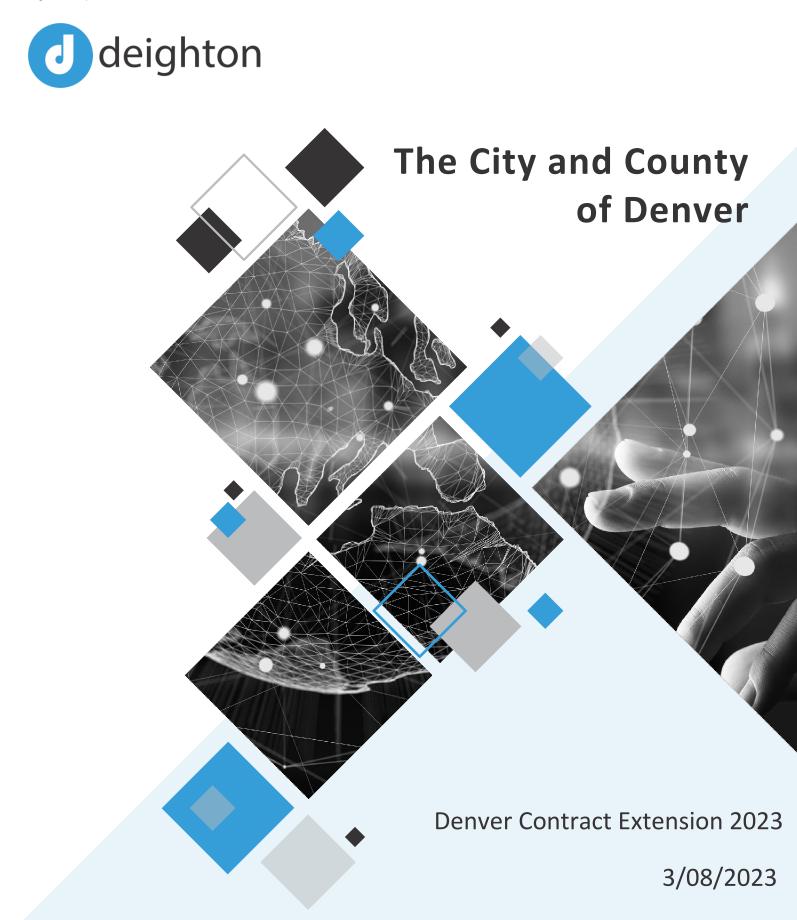
DOTI-202367671-07 (201627262-07) DEIGHTON ASSOCIATES LTD.

DocuSigned by: _____ By: FA3FAD020E0A4D8.

Name: <u>Rob Piane, P.Eng</u> (please print)		
·	(please print)	

ATTEST: [if required]

By: _____



Confidentiality Statement

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If a public request is made to obtain Deighton's proposal, further to the omission of Deighton's confidential information, Deighton requests the opportunity to provide a redacted version where all commercially sensitive information will be removed in order to protect Deighton's intellectual property throughout our processes, methodologies, and standards, along with our software logic and architecture.

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Introduction

The City and County of Denver (CCD) transportation asset management system began with the implementation of a dTIMS based pavement management system in 1996. Since that initial implementation, Deighton Associates Ltd., (DAL) and CCD have continuously enhanced and refined the asset management methodology and scope of assets being managed.

This proposal is provided to CCD, Department of Transportation and Infrastructure, Asset Management Division as a basis for the continued refinement and enhancement of the CCD Transportation Asset Management system.

Tasks in this Proposal

The following tasks will be considered in this proposal:

Alley Analysis

CCD has collected alley inventory and condition data and preliminary runs of the analysis have been executed. Based on the initial results, some modifications may need to be made to the Slurry Seal triggering algorithm. With final budget numbers from CCD the analysis can then be run, and the results and documentation delivered.

The alley data collection that was not completed in 2022 will be completed in 2023 and included in the analysis.

Import Completed, Committed and Bond Work

CCD staff will summarize their completed 2022 work, Bond work and committed road work and Deighton will modify the dTIMS database to accept this data and import it to support the next strategic analysis. CCD would like the 2022 and 2023 committed work entered into dTIMS.

Data Collection and Analysis

CCD will be collecting updated condition and inventory data for various assets in the 2022 calendar year. In the past, Deighton has taken on the role of evaluating various vendors through an RFP process and contract with a data collection vendor that meets specific technical, scheduling and budget requirements. CCD will be assuming that responsibility this year.

CCD has decided to update their baseline condition survey across their entire road network using automated data collection techniques that are provided by various vendors. This task will consist of data collection of all arterial, collector and local roadways in Denver. Data to be collected includes surface distresses, roughness, and rutting; the estimated quantity of data collection is 2550 miles. Generally, two-lane arterial and collector roadways will be surveyed with a single pass, and four-lane roads will be surveyed with one pass in each direction. Local roads will be surveyed in a single direction. Project management of the data collection will be the responsibility of CCD.

As part of the data collection services, Deighton will provide a summary of the required pavement data and prepare an empty "collect" file for use by the vendor to return the collected and processed condition data.

Deighton will review a sample output from the data collection vendor to confirm the format, location



referencing and units of measure. When the complete network data is received, the data will be vetted for completeness and a report to CCD will be prepared for their comment and action. Finally, Deighton will load the processed condition data into dTIMS so that it is ready for the next analysis.

Deighton advises CCD to retain a percentage of the data collection contract amount until final acceptance of the condition data is issued by Deighton.

Prior to running the analysis, Deighton will investigate applying the crack seal treatment for an entire neighborhood rather than just individual segments. This would result in a more cohesive program and could result in overall savings due to economies of scale. Deighton will review the current treatment decision logic, discuss with CCD any proposed changes, and then implement and test these changes in a test environment. If, after reviewing the results, they are satisfactory, then the production environment can also be updated.

Any data collection and analysis not completed in 2022 will be completed in 2023.

Annual Support and Software Maintenance

Included in this line item is an annual fee to cover support of the users of the CCD dTIMS software and the maintenance of the dTIMS software licenses owned by CCD. The System Training task covers general system training that is intended to introduce and familiarize CCD staff with new features and functionality that is made available through maintenance enhancements made to the software.

Annual Web hosting

DAL is providing hosting services for the CCD dTIMS platform and all related databases. The hosting is provided by a third party that has facilities within the United States and can provide the required performance, security and backup services.

Cost Estimate

2023 Tasks	Estimated Cost
Contract Execution	\$2,000.00
Alley Analysis	\$27,180.00
Import Completed, Committed and Bond Work	\$19,040.00
Data Collection and Analysis	\$147,572.00
Annual Support and Software Maintenance	\$118,132.00
Annual Web hosting	\$16,200.07
2022 Subtotal	\$330,124.07
Less 2021 Funds	\$115,190.18
New Funding Required	\$214,933.89

The following is a cost estimate for the tasks described above.

Schedule

The work described in this proposal is proposed to be accomplished in the 2023 fiscal year commencing when a notice to proceed is received.