

# AGENDA

## Denver Board of Water Commissioners

Denver Water Administration Building  
1600 West 12<sup>th</sup> Avenue  
Denver, CO  
Board Room, Third Floor

**Wednesday, August 9, 2017 9:00 a.m.**

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### I. INTRODUCTORY BUSINESS

#### A. Call to Order and Determination of Quorum

#### B. Public Comment and Communications

At this point in the agenda, the Board may allow members of the public to address the Board on any item of interest within the jurisdiction of the Board, and not on the agenda for action. Speakers wishing to address a specific Action Item will be invited to address the Board when the item is being considered. Three minutes are allowed for each person unless the President determines otherwise.

1. Distributor Communications
2. Citizen Advisory Committee Communications

#### C. Ceremonies, Awards and Introductions

### II. ACTION ITEMS

#### A. Consent Items

Items listed below are considered routine and may be enacted by one motion and vote. If any Board member desires discussion beyond explanatory questions, or corrections to the Minutes, the President may order that item to be considered in a separate motion and vote.

1. Minutes from July 12, 2017 – Open and Executive
2. Minutes from July 26, 2017 – Open and Executive
3. Contract 17091A First Amendment to Agreement with Stantec Re: Recycled Water Stakeholder and Rulemaking Consulting Support
4. Contract 17189A S. Platte Collection System - N. Metro Tanabe Reservoir Fencing and Roadway Improvements
5. Contract 16900A Chatfield Pump Station Modifications
6. Contract 16942A Marston Treatment Plant Electrical Upgrades

7. Contract 17020A Marston Treatment Plant Site Access Improvements
8. Contract 16998A Denver International Airport 2017 Vaults and Cathodic Protection Improvements
9. Ratification of Construction Contract Change Orders and Amendments and Professional Services Agreement Amendments
10. Contract 16587A Thomson Reuters Online Subscription Services

**B. Individual Approval Items**

- |  |                       |           |
|--|-----------------------|-----------|
| <b>1. Contract 17019A-B Lean Design Support for Northwater Treatment Plant</b> | Tom Roode/Bob Mahoney | 5 minutes |
|--|-----------------------|-----------|

**III. POLICY MATTERS**

- |   |                 |            |
|---|-----------------|------------|
| <b>A. Second Quarter Board Report and Financial Update</b>  | Angela Bricmont | 60 minutes |
| <b>B. Five Year Financial Plan and Revenue Requirements</b> | Fletcher Davis  | 10 minutes |

**IV. EXECUTIVE UPDATE**

- A. CEO Update**
- B. CFO Update**
- C. Operations Update**

## **V. BRIEFING PAPERS & REPORTS**

**A. Briefing Paper**

**B. Report**

## **VI. ADJOURNMENT**

## **VII. TRUSTEE MATTERS**

## **VIII. EXECUTIVE SESSION**

The Board may adjourn the regular meeting and reconvene in executive session on topics authorized by C.R.S. Sec. 24-6-402 or D.R.M.C Sec. 2-34.

**A. Confidential Report § 24-6-402(4)**

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-A-3

## First Amendment to Agreement with Stantec Re: Recycled Water Stakeholder and Rulemaking Consulting Support Contract # 17091A

Action by Consent

Individual Action

### Summary:

In March of 2017, Denver Water began to lead a stakeholder process to add new uses for recycled water to the State recycled water regulation referred to as "Regulation No. 84." Denver Water's proposed new uses included livestock washdown operations, toilet flushing, irrigation of commercial edible crops, irrigation of community gardens, and impoundment storage.

On March 24, 2017, after a competitive selection process, the Board approved an Agreement with Stantec to provide technical and consulting support to Denver Water for the stakeholder process and a rulemaking hearing scheduled to occur in August of 2018 before the Water Quality Control Commission ("WQCC"). Shortly after approval of the Stantec Agreement, the following events occurred which could not be anticipated in advance.

- Denver Water lost its Recycled Water Program Manager resulting in a loss of internal technical support;
- The Water Environment and Reuse Foundation ("WERF") issued its Final Report on Risk-Based Framework for the Development of Public Health Guidance for Decentralized Non-Potable Water Systems. The Water Quality Control Division ("Division") would like Denver Water to utilize this complex framework to evaluate each of its proposed recycled water uses.
- The Division expressed a desire to have detailed technical memoranda to support each of Denver Water's proposed uses.
- The Division expressed the expectation that Denver Water will address salinity impacts on a statewide basis for each of the new uses.

Each of these items has created a need to modify Stantec's scope of work and budget. Under the attached amendment to Agreement No. 17091A, Stantec's budget will increase by \$110,000.00 to a total compensation not to exceed \$356,663.00.

### Budget Information:

The total amount of this contract is \$356,663, and the term of the contract is from March 24, 2017 to October 31, 2018. Funds for this service/contract will come from the 2017 budget for Treated Water Planning, which has sufficient funds to pay the \$250,795 estimated to be needed in 2017. The remaining \$ 105,868 will be budgeted in 2018.

### Selection of Business Partner:

A competitive selection process was used in the initial selection of Stantec.

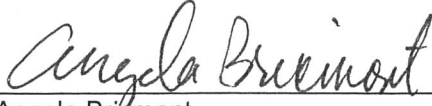
### Recommendation:

It is recommended that the Board approve the First Amendment to Agreement No. 17091A with Stantec Consulting Services, Inc.

**Approvals:**




\_\_\_\_\_  
Mike King  
Chief External Affairs Officer



\_\_\_\_\_  
Angela Brimont  
Chief Finance Officer

Respectfully submitted,

  
\_\_\_\_\_  
James S. Lochhead  
CEO/Manager

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-A-4

## S. Platte Collection System - N. Metro Tanabe Reservoir Fencing and Roadway Improvements Contract 17189A

Action by Consent

Individual Action

### Summary:

The Downstream Reservoir Program consists of the North, South and Lupton Lakes complexes. The North Complex is located at approximately 112th Avenue and Brighton Road. The five reservoirs in the North Complex are each fenced for safety and security reasons prior to bringing each reservoir online. This project consists of fencing the Tanabe Reservoir, and the existing mining fence constructed by LaFarge West, Inc. will be removed.

This fencing project will improve entrances and access roads into Tanabe Reservoir and replace the existing mining fence with a new 8-foot chain link fence with 3-strand barbed wire in accordance with Denver Water security standards.

### Budget Information:

This work will be completed in 2017. The 2017 Capital Improvement Plan for Downstream Reservoir Storage Tanabe Fencing Business Unit does not include sufficient funds for the project. A project budget adjustment in the amount of \$49,000 was previously approved by the System and Program Managers.

### Selection of Business Partner:

Denver Water solicited bids from two General Contractors listed on the Prequalified Contractor List under the Earthwork discipline and two from the Landscape, Irrigation, and Fencing discipline. This Contract was an unrestricted bid process using Invitation to Bids on the QuestCDN platform. On July 27, 2017, bids were received from three General Contractors. Environmental Logistics was selected based on the lowest cost bid.

### S/MWBE Information:


*There was a 8% Minority Women Business Enterprise (MWBE) participation goal required for the construction portion of the project. Environmental Logistics attained 82.90% MWBE participation.*

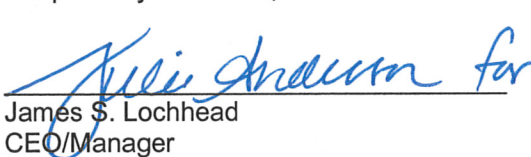
### Recommendation:

It is recommended that the Board approve Contract 17189A with Environmental Logistics for construction of the S. Platte Collection System – N. Metro Tanabe Reservoir Fencing and Roadway Improvements for contract period August 9, 2017 through December 29, 2017 for a total contract amount not to exceed \$376,005.16.

### Approvals:

Respectfully submitted,

  
Robert J. Mahoney  
Chief Engineering Officer

  
James S. Lochhead  
CEO/Manager

  
Angela Bricmont  
Chief Finance Officer

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-A-5

## Chatfield Pump Station Modifications Contract # 16900A

Action by Consent

Individual Action

### Summary:

The Chatfield Pump Station receives potable water from Foothills Water Treatment Plant by way of gravity through Conduit No. 105 and consists of a Low Pressure Side that serves the south west metro area by way of Conduit No. 115 and a High Pressure Side that delivers water to the Ken-Caryl Water District; the combined capacity to deliver potable water is 30 million gallons per day. The pump station was constructed in 1999 to replace the original pump station formerly owned by the Ken-Caryl Water District. As part of the Programs and Systems approach to identifying and budgeting for projects, Chatfield Pump Station was identified and prioritized as a facility in need of upgrades in order to meet the program's Key Performance Indicators of reliability and safety.

This project consists of the replacement of obsolete variable frequency drives, deteriorated HVAC equipment, the installation of new pump and HVAC controls, electrical system modifications, electrical systems analysis and a new meter vault that allows flow of potable water from Ken-Caryl Water District for improved redundancy. New equipment and systems will improve operations, safety for Denver Water personnel, reduce the arc flash (electrical burn) safety hazard and satisfy the latest building code and Denver Water design requirements.

### Budget Information:

The work begins in 2017 and will be completed in 2018. The 2017 Capital Improvement Plan for Chatfield Pump Station Modifications Business Unit includes sufficient funds for the estimated \$800,000 of the 2017 expenditures. The remaining funds will be budgeted for the 2018 Capital Improvement Budget.

### Selection of Business Partner:

Denver Water solicited bids from 4 General Contractors listed on the Prequalified Contractor List under the electrical discipline. This Contract was a restricted bid process using Invitation to Bids on the QuestCDN platform. On July 18, 2017, bids were received from 4 General Contractors. Sturgeon Electric Company Inc., of Colorado was selected based on the lowest cost bid.

### S/MWBE Information:

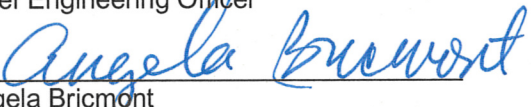
*There was a 5% Minority Women Business Enterprise (MWBE) participation goal required for the construction portion of the project. Sturgeon Electric Company Inc. attained an 18.30% MWBE participation.*

### Recommendation:

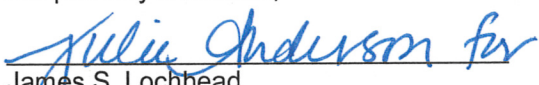
It is recommended that the Board approve Contract 16900A with Sturgeon Electric Company Inc. for Chatfield Pump Station Modifications for the contract period August 9, 2017 to July 26, 2018 for a total contract amount not to exceed \$3,560,090.

### Approvals:

  
Robert J. Mahoney  
Chief Engineering Officer

  
Angela Bricmont  
Chief Finance Officer

Respectfully submitted,

  
James S. Lochhead  
CEO/Manager

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-A-6

## Marston Treatment Plant Electrical Upgrades Contract 16942A

Action by Consent

Individual Action

### **Summary:**

The Marston Treatment Plant (MTP) is located at 6100 West Quincy Avenue, Denver, Colorado 80235, at an elevation of approximately 5,500 feet above mean sea level. MTP was constructed in 1924 and provides treated water capacity to the distribution system. The MTP has been substantially modified over the years, but the electrical equipment being replaced in this project has been identified by Denver Water's Engineering Division as needing to be upgraded to reduce arc flash incident energy to improve personnel safety. This project will also increase equipment reliability and extend service life while enhancing operations and maintenance flexibility for voltage adjustments.

Current arc flash danger prohibits maintenance personnel from safely working in the filter plant electrical room. This project will reduce the probability of unsafe energy levels by replacing the transformers with secondary unit substation transformers that have close-coupled secondary switchgear. These modifications, along with the settings obtained from the specified Electrical Systems Analysis, will reduce the unsafe energy levels to within an acceptable range which will allow maintenance personnel to safely work in the filter plant electrical room.

### **Budget Information:**

The work begins in 2017 and will be completed in 2018. The 2017 Capital Improvement Plan for Marston TP Electrical Upgrades (Arc Flash Reduction) Business Unit includes sufficient funds for the estimated \$1,173,320 of 2017 expenditures. The remaining funds will be budgeted for the 2018 Capital Improvement Budget.

### **Selection of Business Partner:**

Denver Water solicited proposals from four General Contractors listed on the Prequalified Contractor List under the Electrical discipline. This Contract was a restricted proposal process using Instructions to Proposers on the QuestCDN platform. On July 18, 2017, proposals were received from four General Contractors. Sturgeon Electric Company Inc., of Colorado was deemed the most qualified proposer which includes a price of \$2,683,383.

### **S/MWBE Information:**


*There was a 3% Minority Women Business Enterprise (MWBE) participation goal required for the construction portion of the project. Sturgeon Electric Company Inc. attained 6.89% MWBE participation.*

### **Recommendation:**

It is recommended that the Board approve Contract 16942A with Sturgeon Electric Company Inc. for electrical equipment upgrades for the contract period August 9, 2017 to February 28, 2018 for a total contract amount not to exceed \$2,683,383.




**Approvals:**

  
Robert J. Mahoney  
Chief Engineering Officer

  
Angela Bricmont  
Chief Finance Officer

Respectfully submitted,

  
James S. Lochhead  
CEO/Manager

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-A-7

## Marston Treatment Plant Site Access Improvements Contract 17020A

Action by Consent

Individual Action

### Summary:

Operations and Maintenance staff identified three locations where site stairs would improve Denver Water personnel and public safety and accessibility to exterior infrastructure at the Marston Treatment Plant. Currently, these locations are accessed by walking on grassy slopes at all seasons of the year. For weather and durability requirements, elevated aluminum stairs were selected for the project. The project includes the installation of aluminum stairs over concrete foundations, in addition to earthwork and site restoration at three exterior locations.

### Budget Information:

The work will be completed in 2017. The 2017 Capital Improvement Plan for the 2017 Capital Improvement Plan for Marston Stairs Addition Business Unit does not include sufficient funds for the project. A project budget adjustment is recommended by the System and Program Managers.

### Selection of Business Partner:

Denver Water solicited bids from three General Contractors listed on the Prequalified Contractor List under the Heavy Civil Discipline. This Contract was a restricted bid process using Invitation to Bids on the QuestCDN platform. On July 25, 2017, bids were received from two General Contractors. Concrete Works of Colorado, Inc. was selected based on the lowest cost bid.

### S/MWBE Information:

There was a 3% Minority Women Business Enterprise (MWBE) participation goal required for the construction portion of the project. Concrete Works of Colorado, Inc. attained 3% MWBE participation.

### Recommendation:

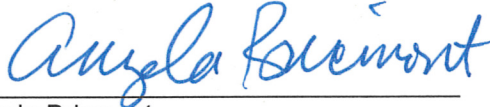
It is recommended that the Board approve Contract 17020A with Concrete Works of Colorado, Inc. for the Marston Treatment Plant Site Access Improvements Project for the contract period August 9, 2017 through December 8, 2017 for a total contract amount not to exceed \$251,390.

### Approvals:

  
Robert J. Mahoney  
Chief Engineering Officer

Respectfully submitted,

  
James S. Lochhead  
CEO/Manager

  
Angela Bricmont  
Chief Finance Officer

*Denver Water aspires to be the best water utility in the nation.*

Integrity :: Vision :: Passion :: Excellence :: Respect



# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-A-8

## Denver International Airport 2017 Vaults and Cathodic Protection Improvements Contract 16998A

Action by Consent

Individual Action

### **Summary:**

The annual Denver International Airport (DIA) vault improvements program typically includes replacement of existing vault access hatches and ladders. Many of the failing hatches are extremely heavy, which creates an unsafe condition for Operations and Maintenance crews. The annual DIA cathodic improvements program typically involves testing and repairs to prevent corrosion and provide cathodic protection to Denver Water's existing distribution pipelines.

Three vaults and six cathodic protection sites were selected for the 2017 improvements work. The two programs were combined because all work sites are located outside of the restricted area and can be performed under one contract.

### **Budget Information:**

The work will be completed in 2017. The 2017 Capital Improvement Plan for the DIA Vault Improvements Program and the DIA Cathodic Protection Improvements Program Business Units include sufficient funds for the estimated \$265,900 of 2017 expenditures.

### **Selection of Business Partner:**

Denver Water solicited bids from four General Contractors that were prequalified to perform vault improvements work at DIA. This contract was an unrestricted bid process using Invitation to Bids on the QuestCDN platform. On July 25, 2017, bids were received from four General Contractors. Concrete Works of Colorado was selected based on the lowest cost bid.

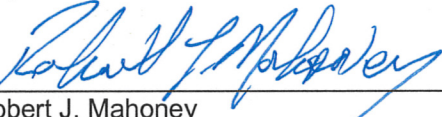
### **S/MWBE Information:**


*There was a 5% Minority and Women Business Enterprise (MWBE) participation goal required for the construction portion of the project. Concrete Works of Colorado achieved 5.00% participation.*

### **Recommendation:**


It is recommended that the Board approve Contract 16998A with Concrete Works of Colorado for the contract period of August 9, 2017 to December 15, 2017 for a total contract amount not to exceed \$265,900.

### **Approvals:**

  
Robert J. Mahoney  
Chief Engineering Officer

  
Angela Bricmont  
Chief Finance Officer

Respectfully submitted,

  
James S. Lochhead  
CEO/Manager

## DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-A-9

### Ratification of Construction Contract Change Orders and Amendments and Professional Services Agreement Amendments

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Action by Consent

Action

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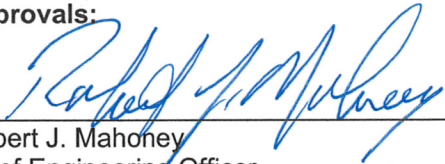
**Summary:**

The attached are Construction Contracts Change Orders and Amendments and Professional Services Agreement Amendments for Board ratification for June 2017.

**Recommendation:**

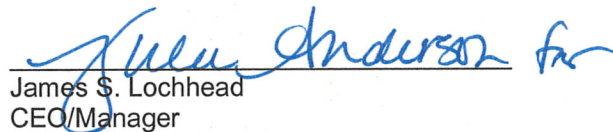
It is recommended that the Board ratify these Construction Contract Change Orders and Amendments and Professional Services Agreement Amendments.

**Approvals:**



Robert J. Mahoney  
Chief Engineering Officer

Respectfully submitted,



James S. Lochhead  
CEO/Manager

**RATIFICATION OF CONSTRUCTION CONTRACT**

**CHANGE ORDERS AND AMENDMENTS AND PROFESSIONAL SERVICES AGREEMENT AMENDMENTS**

Pursuant to procedure previously established, the following Construction Contract Change Orders and Amendments and Professional Services Agreement Amendments are hereby submitted for Board ratification.

**CONSTRUCTION CONTRACT CHANGE ORDERS AND AMENDMENTS**

**CONSTRUCTION OF THE OPERATIONS COMPLEX REDEVELOPMENT PROJECT WORK PACKAGE**

**NO. 1 – GENERAL CONDITIONS AND SITE WORK**

Contractor: Mortenson Construction

Change Order No. 3

Contract 15630B

Scope: Scope of work change.

ADD	\$	35,911.00
Original Contract Amount:	\$	24,227,536.00
Authorized Contract Amendments:	\$	13,602,308.00
Authorized Change Orders:	\$	108,120.00
Current Contract Amount:	\$	37,937,964.00
Current Increase in Contract:	\$	35,911.00
Revised Contract Amount:	\$	37,973,875.00
Percentage of Total Amendments to Date:		56.14%
Percentage of Total Change Orders to Date:		0.59%

## DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-A-10

### Thomson Reuters Online Subscription Services Request for additional contract funds Contract # 16587A

Action by Consent

Individual Action

**Summary:**

Thomson Reuters provides subscription services for online legal books and legal research, utilized by Denver Water's Office of General Counsel. Annual renewal of this subscription service provides continued support and access to various online legal books and legal research critical to legal services.

**Budget Information:**


The total amount of this contract amendment is \$50,000.00, and the term of the contract is May 23, 2016 to May 22, 2018. Funds for this contract are included in the 2017 IT Asset Management budget which has sufficient funds to pay the \$25,000 estimated to be needed in 2017. The remaining \$ 25,000 will be budgeted in year 2018.

**Recommendation:**

It is recommended that the Board approve the Second Amendment to Contract 16587A with Thomson Reuters for online subscription services for an addition of \$50,000 for a total amended contract amount not to exceed \$145,000.

**Approvals:**

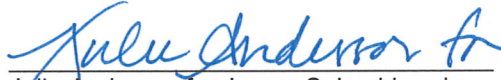
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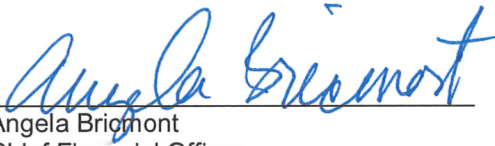
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Chris Dermody  
Chief Information Officer

Respectfully submitted,



Julie Anderson for James S. Lochhead  
CEO/Manager



Angela Brimont  
Chief Financial Officer

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 9, 2017

Board Item: II-B-1 <sup>10</sup>

## Lean Design Support for the Northwater Treatment Plant Contract Nos. 17019A and 17019B

Action by Consent

Individual Action

### **Summary:**

The Northwater Treatment Plant (NTP) is a new 150 million gallon per day facility to be constructed on Denver Water's Ralston Reservoir property north of Golden on Colorado State Highway 93. Denver Water has engaged multiple discrete design package consultants, an Owner's Representative, and a Construction Manager-at-Risk to execute the design phase services for the NTP.

Simpler North America, LLC is expected to conduct twelve week-long Process and Preparation (2P) events to support NTP design efforts. The events will be held to develop the details of each component of the NTP including, but not limited to: administrative and office spaces, sedimentation facilities, flocculating facilities, disinfection basins, gravity thickeners, chemical storage and distribution, fresh water reservoirs, and filtering facilities. Simpler North America, LLC shall help develop the capabilities of the various Denver Water project teams to use visual project management techniques. The specific contract values are presented in Table 1.

**Table 1: Simpler North America, LLC Contract Summary**

Contract #	Firm	Description of Services	Rate
17019A	Simpler North America, LLC	Simpler Design System Consultant	\$3,300/Day
		Simpler Design System 2P Event (one week)	\$14,850/Event
		Reimbursable Expenses	As approved by Denver Water

Lean Project Consulting, Inc. is expected to conduct approximately twelve two-day coaching sessions to support NTP design. Coaching shall include, but not be limited to: developing visual project management techniques and Lean tools and methods with the various project teams. The specific contract values are presented in Table 2.

**Table 2: Lean Project Consulting, Inc. Contract Summary**

Contract #	Firm	Description of Services	Rate
17019B	Lean Project Consulting, Inc.	Managing Principle	\$3,400/Day
		Senior Coach	\$2,100 - 2,300/Day
		Principal	\$2,100/Day
		Reimbursable Expenses	As approved by Denver Water

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**Budget Information:**

The total amount of the 17019A contract is not to exceed \$200,000; the total amount of the 17019B contract is not to exceed \$60,000. The term of both contracts is August 9, 2017 to November 30, 2018. Funds for these contracts will come from the 2017 budget for the Northwater Treatment Plant Business Unit, which has sufficient funds to pay the \$25,000 estimated to be needed in 2017. The remaining \$235,000 will be budgeted in 2018.

**Selection of Business Partner:**

Denver Water issued a Request for Proposals on Rocky Mountain E-Purchasing System (BidNet), on Denver Water's website, directly to known suppliers, and through notifications to the SBE and MWBE communities. Denver Water received three proposals. Lean Project Consulting, Inc. and Simpler North America, LLC were both selected for separate portions of the Scope of Work based on their pricing, industry expertise and experience.

Simpler North America, LLC has previously provided other Lean consulting services for Denver Water, under Agreement No. 13913A. Agreement No. 13913A was executed on November 16, 2011 and expired on December 31, 2016.

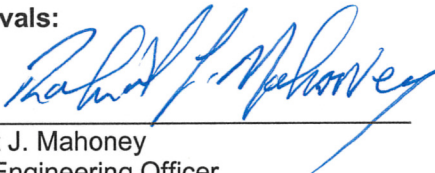
**S/MWBE Information:**

*Lean Project Consulting, Inc. is an SBE. Simpler North America, LLC is neither SBE nor MWBE.*

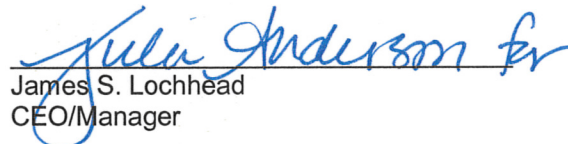
**Recommendation:**

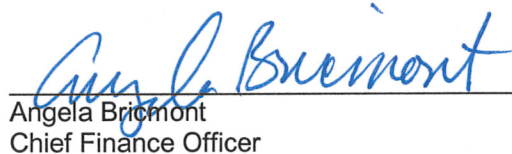
It is recommended that the Board approve Agreements 17019A with Simpler North America, LLC and 17019B with Lean Project Consulting, Inc., respectively, for Lean Design Support for the Northwater Treatment Plant Project for the contract period August 9, 2017 to November 30, 2018 for a total contract amount not to exceed \$260,000.

**Approvals:**

  
\_\_\_\_\_  
Robert J. Mahoney  
Chief Engineering Officer

Respectfully submitted,

  
\_\_\_\_\_  
James S. Lochhead  
CEO/Manager

  
\_\_\_\_\_  
Angela Brichmont  
Chief Finance Officer