AGENDADenver Board of Water Commissioners

Denver Water Administration Building 1600 West 12th Avenue Denver, CO Board Room, Third Floor

Wednesday, July 10, 2019 9:00 a.m.

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 June 12, 2019 Open Session
- 2. Minutes from June 26, 2019 Open Session
- 3. Conduit No. 3 Aerial Crossing Replacement at Bear Creek and Associated Improvements Contract 503892
- Leetsdale Pump Station Surplus Property Donation to Arapahoe County Open Space Contract 504054
- 5. Change Order No. 1 for Conduit No. 10 Isolation Valve Improvements Contract 503173

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B. Individual Approval Items

 Intergovernmental Agreement with the City and County of Denver for Recycled Water Infrastructure Funding at the National Western Center – Contract 504075

Abbey Antolovich 10 minutes

 Sixth Amendment for Gross Reservoir Expansion Design Engineer – Contract 503074 Jeff Martin

15 minutes

 Gross Reservoir Expansion Construction Manager/General Contractor – Contract 504090

 Interconnect Agreement with South Adams County Water and Sanitation District – Contract 504084 Dave Bennett

5 minutes

III. POLICY MATTERS

A. 2020 Draft Business Plan and Balanced Scorecard

Julie Anderson

10 minutes

IV. EXECUTIVE UPDATE

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

V. BRIEFING PAPERS & REPORTS

- A. Briefing Papers
- B. Reports

VI. ADJOURNMENT

VII. TRUSTEE MATTERS

VIII. EXECUTIVE SESSION

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

A. Confidential Report D.R.M.C. Sec. 2-34

Meeting Date: July 10, 2019 Board Item: II-A-3

Conduit No. 3 Aerial Crossing Replacement at Bear Creek and Associated Improvements Contract 503892

⊠Action by Consent	□Individual Action

Purpose and Background:

Conduit No. 3 crosses aerially over Bear Creek by means of attachment to a vehicular bridge on Federal Boulevard near Hampden Avenue. The 24-inch steel pipe, installed in 1967, has become extremely corroded and required an emergency leak repair in 2018. The pipe will be replaced in its existing location with a new 24-inch steel pipe with specialized coating. This project also includes installing 1,050-feet of new 8-inch main and transferring 12 service lines, 11 of which are lead, from Conduit No. 3 to the new main to remove the undesirable condition of having service lines on a conduit. Additionally, there are two inoperable isolation valves on Conduit No. 3 in the vicinity of this project that will be replaced.

Budget and Schedule:

The total amount of this contract is \$1,515,000 and the term of the contract is July 10, 2019 to January 31, 2020. Funds for this contract will come from the 2019 budget for the 2019 Aerial Crossing Replacements Program business unit, which has sufficient funds to pay the \$1,415,000 estimated to be needed in 2019. The remaining funds will be budgeted in the year 2020.

Selection of Business Partner:

Denver Water solicited bids from six general contractors listed on the Prequalified Contractor List under the Pipelines discipline. This contract was a restricted bid process using invitations to bid on the QuestCDN platform. On June 25, 2019 bids were received from four general contractors. T. Lowell Construction, Inc. was selected based on the lowest cost bid.

S/MWBE Information:

The Minority and Women-owned Business Enterprise goal established for this construction project is 8% participation. T. Lowell Construction, Inc. achieved 8% participation.

Recommendation:

It is recommended that the Board approve Contract 503892 with T. Lowell Construction, Inc. for the Conduit No. 3 Aerial Crossing Replacement at Bear Creek and Associated Improvements project for the contract period of July 10, 2019 to January 31, 2020 for a total contract amount not to exceed \$1,515,000.

	☐ Christopher R. Dermody, Chief Information Officer
☐ Julie Anderson, Chief of Staff	☐ Brian D. Good, Chief Administrative Officer
☐ Jessica R. Brody, General Counsel	☐ Mike King, Chief External Affairs Officer
☑ Angela C. Bricmont, Chief Financial Officer	⊠ Robert J. Mahoney, Chief Engineering Officer
☐ Gail Cagle. Chief Human Resources Officer	☐ Thomas J. Roode. Chief Operations Officer



Meeting Date: July 10, 2019 Board Item: II-A-4

Leetsdale Pump Station Surplus Property Donation to Arapahoe County Open Space Contract 504054

⊠Action by Consent	□Individual Action

Purpose and Background:

On October 10, 2018, the Board declared 0.6 acres of the decommissioned Leetsdale Pump Station property surplus. The property, zoned agricultural, was evaluated for a variety of disposal options and determined that the best use for the site and community, along with Denver Water's continued use of the reserved easement for Conduit No. 5, would be for open space, neighborhood park or community garden purposes. Arapahoe County Open Space is willing to take on this additional asset with immediate maintenance responsibilities, along with pest control, and develop the site into a community benefit within the next five years.

In Contract 504054, Denver Water will donate the property to Arapahoe County Open Space with these pertinent aspects:

- Exclusive easement is reserved for Denver Water's Conduit No. 5.
- Property is being conveyed as-is.
- Property is deed restricted for open space purposes.
- Arapahoe County Open Space commits to develop the site within five years and maintain with defined maintenance standards in the interim.

Budget and Schedule:

There is no budgetary impact for this item.

S/MWBE Information:

Small/Minority and Women-owned Business Enterprise is not applicable for this item.

Recommendation:

It is recommended that the Board approve Contract 504054 with Arapahoe County Open Space for the conveyance of the Leetsdale Pump Station property.

☑ James S. Lochhead, CEO/Manager	☐ Christopher R. Dermody, Chief Information Officer
☐ Julie Anderson, Chief of Staff	$\hfill\square$ Brian D. Good, Chief Administrative Officer
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Meeting Date: July 10, 2019 Board Item: II-A-5

Change Order No. 1 for Conduit No. 10 – Isolation Valve Improvements Contract 503173

□Individual Action
 - Individual / totion

Purpose and Background:

The Conduit No. 10 Isolation Valve Improvements project was awarded to Reynolds Construction, LLC in the amount of \$695,900 on July 25, 2018. The project is nearly complete and consists of the installation of two double butterfly valve assemblies and a 12-inch high density polyethylene temporary bypass water line to feed residential and business water services throughout construction. The amount of this Change Order brings the contract total over the CEO/Manager's signing authority and triggers the need for Board approval.

Change Order No. 1 tasks include:

- Reconfigure and relocate 12-inch and six-inch ductile iron water lines and appurtenances off Conduit No. 10 at station 248+25 to a location south and east of the original design due an existing power pole within the designed alignment. This item includes excavation, ductile iron fittings and piping, and labor.
- Repair of an existing leak in the 16-inch ductile iron waterline supplying the Trailmark neighborhood. The leak was found while pressure testing the new bypass piping and needed to be repaired in order to complete the work.
- Provision of a 24-hour pipe watch and reimbursement to Reynolds Construction, LLC for delays to construction operations related to the Lockheed Martin bypass connection. Lockheed Martin needed to address a contingency or back-up plan for water supply to their facility should there be issues causing an extended outage during construction activities. Lockheed Martin requested additional steps be taken during the connection of the 12-inch high density polyethylene bypass and subsequent new Conduit No. 10 valve installations. The costs include delays to construction activities to coordinate and address the issues as well as labor and material to provide the additional back-up plan. Lockheed Martin provided partial reimbursement of these costs.
- Relocation of the 6-inch nozzle and reinforcement pad on Conduit No. 10 from station 88+59.07 to station 88+61.74. The relocation was needed to avoid the interference of an existing steel buttstrap found at the designed location. This work also included additional asbestos mitigation at the new location.

Budget and Schedule:

The total amount of this change order is \$77,078.67 for a new total contract amount of \$772,078.67. There are insufficient funds in the 2019 project budget for the Conduit No. 10 Isolation Valve Improvements business unit and a budget adjustment is needed for 2019. The System and Program Managers have been notified of the additional use of funds.

Selection of Business Partner:

Reynolds Construction, LLC was selected as the general contractor through a quality-based selection process which included five proposers. The original contract was awarded July 25, 2018 in the amount of \$695,900.

S/MWBE Information:

The Minority and Women-owned Business Enterprise goal established for this project is 5% participation. Reynolds Construction, LLC achieved 5.8% participation.



Recommendation:

It is recommended that the Board approve Change Order No. 1 to Contract 503173 with Reynolds Construction, LLC for an extension of the contract period through April 16, 2019 and for an addition of \$77,078.67 for a total amended contract amount not to exceed \$772,078.67.

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☑ James S. Lochhead, CEO/Manager	☐ Christopher R. Dermody, Chief Information Officer
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Meeting Date: July 10, 2019 Board Item: II-B-1

Intergovernmental Agreement with the City and County of Denver for Recycled Water Infrastructure Funding at the National Western Center Contract 504075

☐ Action by Consent	⊠Individual Action

Purpose and Background:

The City and County of Denver (City) is undertaking the capital construction associated with the redevelopment of the 250-acre National Western Center (NWC), including necessary infrastructure for utility services. The City completed a One Water site evaluation with NWC partners and other stakeholders and determined that the best water source for non-potable demands is recycled water. The City currently estimates that annual non-potable demand at NWC will be 165 acre-feet; approximately 70% of this demand is highly desirable by Denver Water as year-round demand associated with a planned sewer heat recovery system.

The City has also committed to meet water efficiency standards that are more stringent than building code and demonstrate newly allowed recycled water uses, including dual plumbing in buildings for toilet flushing. This will allow Denver Water to have access to recycled water at its future water quality lab that is planned to be located at the NWC. Additionally, the National Western Authority has committed to long-term coordination with Denver Water to demonstrate sustainable water practices, share data regarding sitewide water management, and promote water conservation through public education and outreach. Colorado State University has also committed to meet water efficiency standards and demonstrate the use of recycled water at its facilities.

The City estimates that capital costs for recycled water infrastructure within the NWC are \$2,600,000, which is not included in the NWC project budget so will be paid separately by Denver Water. The NWC is currently under construction and there is an opportunity to install recycled water infrastructure prior to disturbing improved streets and other utility corridors.

Denver Water's recycled water system is an alternative source of supply and available to offset potable water demands. One key element of evaluating the feasibility of recycled water projects is the cost per acre foot (AF). This cost is compared to other supply development options to determine project priority. This recycled water project cost for NWC is currently estimated at approximately \$15,000/AF. The maximum proposed threshold for this project is \$20,000/AF, which allows for flexibility for NWC to adjust demands and associated capital costs to remain below this threshold. Since the design is not fully complete, the cost per acre foot target will allow the City and Denver Water to work together to finalize demands and associated capital requirements. The maximum cost Denver Water is authorizing is \$2.6 million. If the project cost exceeds \$20,000/AF and/or a total cost of \$2.6 million at the final design stage, Denver Water will be relieved of its construction funding obligations.

In addition to the \$2,600,000 infrastructure cost within NWC associated with Contract 504075, Denver Water would also need to construct a recycle water main extension to provide service from an existing conduit to the NWC. This extension is estimated at approximately \$3,000,000 in addition to the \$2,600,000 referenced above. There is potential to convert 220 AF of existing potable demand along the proposed extension route to recycled water usage, including two Denver Public Parks which have indicated early readiness for such conversion. Denver Water will delay installation of this extension unless or until the NWC non-potable demands have materialized and customers along the proposed route have committed to recycled water conversions. The recycled water pipe at NWC will be connected



to a temporary potable supply until the recycled water extension is completed, and customers will be billed for the associated potable water.

The Parties have developed an Intergovernmental Agreement, Contract 504075 in which Denver Water will provide recycled water infrastructure funding at NWC. This agreement includes conditions associated with funding, commitments from the City in exchange for funding, a maximum funding obligation, a milestone-based payment schedule, and remedies if Denver Water's targets for the recycled water project are not met.

Budget and Schedule:

The total amount of this contract is \$2,600,000 and the term of the contract is July 10, 2019 to December 31, 2022. Funds will come from the 2019, 2020, 2021, and 2022 systems and programs capital budget. The 2019 capital budget will require an increase of \$300,000 and the remainder of the funds will be allocated in future years as part of the annual budget approval process.

Recommendation:

It is recommended that the Board approve Contract 504075 with the City for recycled water infrastructure funding at NWC for the contract period July 10, 2019 to December 31, 2022, for a total contract amount not to exceed \$2,600,000.

	☐ Brian D. Good, Chief Administrative Officer
☐ Julie Anderson, Chief of Staff	
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☐ Gail Cagle, Chief Human Resources Officer	
☐ Christopher R. Dermody, Chief Information Officer	

Meeting Date: July 10, 2019 Board Item: II-B-2

Sixth Amendment for Gross Reservoir Expansion Design Engineer Contract 503074

☐Action by Consent	⊠Individual Action

Purpose and Background:

Denver Water has formed an integrated project team comprised of Denver Water staff, consultants, engineers, contractors, specialists, and regulators to deliver the Gross Reservoir Expansion (GRE) project. In January 2018, Denver Water contracted with Stantec/AECOM to fulfill the GRE Design Engineer role. Their scope and fee were negotiated based on our understanding of the work in late 2017.

Since January 2018, program clarity and understanding has improved significantly in many areas including management requirements, regulatory requests, and design feature details. The GRE project management team has carefully monitored potential scope, fee, and schedule changes to the Design Engineer resulting from improved program definition. The project management team identified several areas of change that could not be reasonably anticipated at the start of design including design innovations, regulatory direction, and Construction Manager/General Contractor (CM/GC) interaction.

The purpose of this board item is to execute the sixth amendment to the GRE Design Engineer contract for Phase 2 work as a result of greater design definition, design innovations, and CM/GC incorporation.

Budget and Schedule:

The amount requested for the sixth amendment is \$2,800,478. A table showing the history of amendments is below:

Item	Cost	Description	Notes
Original Agreement	\$13,000,000	Design of GRE	Board Approved December 13, 2017
First Amendment	\$0	Co-location office requirements	Board Approved January 23, 2018
Second Amendment	\$0	Corrections to design engineering labor rates	Board Approved February 12, 2018
Third Amendment	\$539,522	Scope addition – design changes and additions	Board Approved September 12, 2018. Improved communications infrastructure and unexpected regulatory requests.
Fourth Amendment	\$260,000	Scope addition – design changes and additions	Design definition, slightly increased monitoring requirements, unexpected regulatory requests and the addition of owner-controlled contingency.
Fifth Amendment	\$200,000	Scope addition - Outlet Works requirements	
Sixth Amendment	\$2,800,478	Scope addition – CM/GC incorporation, Board of Consultants, regulatory requirements, and additional management time	CM/GC integration; incorporation of design innovation; response to regulatory requirements; key staff extension through completion of Phase 2.
Total Amount:	\$16,800,000		



The total amount of this amendment is \$2,800,478 and the term of the contract is December 13, 2017 to June 1, 2021. Funds for this contract will come from the 2019 budget for Gross Reservoir Expansion business unit, which has sufficient funds to pay the \$1,300,000 estimated to be needed in 2019. The remaining \$1,500,478 will be budgeted in years 2020 and 2021.

Selection of Business Partner:

The GRE Design Engineer was selected through a value-based competitive process which considered qualifications, design approach, technical submissions, and cost.

S/MWBE Information:

No specific Minority and Women-owned Business Enterprise (MWBE) goal was set for the Design Engineer services, although MWBE participation during design was strongly encouraged by Denver Water. The Stantec/AECOM team will achieve an approximate 4.8% MWBE participation for the total of the Phase 2 services.

Recommendation:

It is recommended that the Board approve the sixth amendment to Contract 503074 with Stantec Consulting Services, Inc. for design services for an extension of the contract through June 1, 2021 and for an addition of \$2,800,478 for a total amended contract amount not to exceed \$16,800,000.

☑ James S. Lochhead, CEO/Manager	$\hfill\square$ Christopher R. Dermody, Chief Information Officer
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Meeting Date: July 10, 2019 Board Item: II-B-3

Gross Reservoir Expansion Construction Manager/General Contractor Contract 504090

☐Action by Consent	⊠Individual Action

Purpose and Background:

Denver Water is in the final stage of forming an integrated project team comprised of Denver Water staff, consultants, engineers, contractors, specialists, and regulators to deliver the Gross Reservoir Expansion (GRE) project. The GRE is crucial in providing a secure water future for Denver Water's customers and is a key component to Denver Water's long-term, multi-pronged approach (including conservation, recycled water, and responsible sourcing of new supply) to deliver safe and reliable water.

The purpose of this board item is to execute a Construction Manager/General Contractor (CM/GC) contract with Kiewit-Barnard Joint Venture for planning and pre-construction services. The CM/GC will provide pre-construction services during the design phase. Denver Water's intent is to enter into a construction phase agreement with Kiewit-Barnard based on their performance during the planning and preconstruction services phase and successful negotiation of construction services terms.

Budget and Schedule:

The total amount of this contract is \$4,500,000 and the term of the contract is July 10, 2019 to June 1, 2021. Funds for this contract will come from the 2019 budget for the Gross Reservoir Expansion business unit which has sufficient funds to pay the \$1,760,000 estimated to be needed in 2019. The remaining \$2,740,000 will be budgeted in years 2020 and 2021.

Any adjustments to the annual budget will follow the Denver Water Systems Management process for budget variance.

Selection of Business Partner:

The GRE CM/GC was selected through a value based competitive process which considered qualifications, project approach, technical approach, and cost.

The CM/GC selection process began with an advertised informational meeting about the project and procurement process on August 9, 2018. This meeting was followed by an advertised Request for Qualifications solicitation on October 25, 2018. The solicitation process resulted in submission of three Statements of Qualifications. After careful consideration of the Statements of Qualifications, the program management team decided to move forward with all three respondents: Dragados – ASI Joint Venture; Kiewit – Barnard Joint Venture; and Rocky Concrete Constructors Joint Venture (Lane, Obyashi, and Salini).

The respondents attended the mandatory pre-proposal meeting on March 12, 2019. The meeting provided the respondents with detailed information of expectations for the proposals. Each respondent received the Request for Proposals (RFP) on March 21, 2019. After review of the RFP, the respondents were asked to attend individual site walk review and clarification meetings held on March 20, 21, and 26, 2019.

As required in the RFP, technical and cost proposals were submitted on April 18, 2019. An extensive review team made up of Denver Water, the GRE Design Engineer, and select subject matter experts were tasked with proposal review. After an informal discussion with all reviewers, a smaller selection team was chosen to attend in-person interviews with each respondent on May 7, 8, and 9, 2019. The selection team, along with a Denver Water Executive, participated in each interview, where they were



able to discuss, question, and interact with each respondent. An additional interview was held with the respondent's executive sponsors, Denver Water's Chief Engineering Officer, and the GRE Program Manager.

Following the interviews, the selection team met to discuss their observations and impressions of each respondent. After deliberation and careful consideration, the selection team unanimously selected the Kiewit-Barnard Joint Venture as the preferred GRE CM/GC.

The Kiewit-Barnard Joint Venture will participate in the design phase through the first quarter of 2021. Based on their performance and Denver Water's ability to successfully negotiate each work package's Construction Agreed Price, the Kiewit-Barnard Joint Venture will transition to the general contractor providing construction related services.

S/MWBE Information:

No specific Minority and Women-owned Business Enterprise goal was set for the CM/GC preconstruction services. However, Denver Water required the respondents to seek meaningful participation in the construction phase and a goal will be evaluated and developed in partnership with the CM/GC and the Board prior to Phase 3 construction services.

Recommendation:

It is recommended that the Board approve Contract 504090 with Kiewit-Barnard Joint Venture for CM/GC pre-construction services for the contract period of July 10, 2019 to March 31, 2021 for a total contract amount not to exceed \$4,500,000.

☐ Christopher R. Dermody, Chief Information Officer
☐ Brian D. Good, Chief Administrative Officer
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⊠ Robert J. Mahoney, Chief Engineering Officer
$\hfill\Box$ Thomas J. Roode, Chief Operations Officer

Meeting Date: July 10, 2019 Board Item: II-B-4

Interconnect Agreement with South Adams County Water and Sanitation District Contract 504084

☐ Action by Consent	⊠Individual Action

Purpose and Background:

The South Adams County Water and Sanitation District acting by and through its South Adams County Water and Sanitation District Activity Enterprise ("South Adams") is a Denver Water distributor. In addition to a Master Meter area within Denver Water's Combined Service Area, South Adams serves customers outside the Combined Service Area. South Adams has a lease agreement with Denver Water to use 4,000 acre-feet of potable water per year outside the Combined Service Area. This contract is not subject to the Colorado River Cooperative Agreement ("CRCA") because it was entered before the effective date of the CRCA. However, South Adams has requested an emergency water supply for up to an additional 2,000 acre feet from an existing connection with Denver Water in the event of a system disruption, water quality event, or outage. Under the Interconnect Agreement, water needed for an emergency delivered to South Adams will first be applied to the 4,000 acre-feet agreement and then if necessary to the additional 2,000 acre feet under this contract. The additional 2,000 acre feet is subject to the CRCA. South Adams has agreed to pay the West Slope Charge under the CRCA but requested and staff agreed to reduce the normal Potable Rate for Outside the Combined Service Area by a like amount. Emergency deliveries that exceed the 4,000 acre-feet will fall under the emergency interconnect agreement.

Budget and Schedule:

There is no budgetary impact for this item. If the emergency interconnect is used, South Adams will pay the then current treated water service rate for customers outside the Denver Water Total Service Area less the West Slope Charge amount, which will be paid as provided in the CRCA.

S/MWBE Information:

Small/Minority Women-owned Business Enterprise is not applicable for this item.

Recommendation:

It is recommended that the Board approve Contract 504084 to serve South Adams with emergency water for the contract period July 10, 2019 through July 10, 2024 for an additional 2,000 acre feet, unless terminated by Denver Water or South Adams.

	$\hfill \Box$ Christopher R. Dermody, Chief Information Officer
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