

AGENDA

Denver Board of Water Commissioners

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

Wednesday, August 10, 2016 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 July 13, 2016 – Open and Executive
2. Minutes from July 27, 2016 – Open and Executive
3. Waste Removal in Outlying Areas – Contract 16757A-C
4. Mobile Refueling Services – Contract #16654A
5. Tabulation of Proposals for Foothills Treatment Plant Impressed Current Cathodic Protection Systems - Contract 16659A
6. Tabulation of Bids for Denver International Airport 2016 Vault Improvements -Contract 16044A

7. Agreement with AECOM Technical Services, Inc. for North System Renewal Water Treatment Plant (NSRWTP) Design Package #1 – Site and Civil Improvements - Contract 16811A
8. Agreement with CH2M Hill Engineers, Inc. for North System Renewal Water Treatment Plant (NSRWTP) Design Package #2 –Treatment Process Systems and Structures - Contract 16836A
9. Ratification of Construction Contracts Change Orders and Amendments to Contracts/Agreements

III. POLICY MATTERS

- | | | |
|---|----------------|------------|
| A. 2016 2nd Quarter Financial Forecast | Todd Cristiano | 30 minutes |
| B. 2016 Mid-Year Check-in | Jim Lochhead | 15 minutes |

IV. BRIEFING PAPERS & REPORTS

A. Briefing Paper

1. 2016 Rate Structure Analysis
2. Lupton Lakes Groundwater Cutoff Walls

V. ADJOURNMENT

VI. TRUSTEE MATTERS

VII. 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 10, 2016

Board Item: II-A-3

Waste Removal in Outlying Areas Contract # 16757A-C

Action by Consent

Individual Action

Summary:

Many Source of Supply facilities are located in areas where there are no municipal trash services available and therefore Denver Water must contract for these services at facilities.

Budget Information:

The total amount of this contract is \$113,500, and the term of the contract is October 1, 2016 to September 30, 2019. Funds for this service/contract will come from the 2016 budget for Source of Supply, which has sufficient funds to pay the \$9,500 estimated to be needed in 2016. The remaining \$104,000 will be budgeted in years 2017, 2018 and 2019.

Selection of Business Partner:

In June 2016, Denver Water issued an Invitation for Bid (IFB) via the Denver Water public website, Rocky Mountain E-Purchasing System (BidNet), direct solicitation to a bidder's list as well as the SBE/MWBE contact List. The IFB covers eight different facilities divided into seven schedules based on geographic location to allow vendors to bid on few or all schedules to maximize bid opportunities. Denver Water received only two bids, neither of which are SBE/MWBE.

The selection committee evaluated bids based on price and geographic service area. Mountain View Waste Systems, LLC was selected to provide waste removal for Schedules I and II (Roberts Tunnel and Cheesman Reservoir), and Waste Management of Colorado, Inc. will provide waste removal for Schedules III-VII (Fraser, Dillon, Williams Fork, Eleven Mile, Antero and Ralston Reservoir).

S/MWBE Information:

For 2016 O&M has set an overall 15% Target for MWBE participation in contracts.

Recommendation:

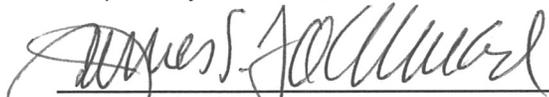
It is recommended that the Board approve Contract # 16757A (Internal Dollar Holding Contract), Contract # 16757B with Waste Management of Colorado, Inc., and Contract # 16757C with Mountain View Waste Systems, LLC for waste removal services for the contract period October 1, 2016 to September 30, 2019 for a total contract amount not to exceed \$113,500.

Approvals:



Thomas J. Rode
Chief Operations and Maintenance Officer

Respectfully submitted,



James S. Lochhead
CEO/Manager



Angela Bricmont
Chief Financial Officer

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 10, 2016

Board Item: II-A-4

Mobile Refueling Services Contract # 16654A

Action by Consent

Individual Action

Summary:

Denver Water has historically used fuel trucks driven by employees to fuel Water Distribution equipment in various locations throughout the combined service area. The employee who drove the fuel truck has retired, and Denver Water would like to use a contractor to provide the on-site fuel delivery service instead of filling this position.

This change allows the fuel station on the new campus to be eliminated, saving approximately \$670,000.00 and eliminating permitting and maintenance costs. Also, the shift from internal resources to a contract results in an estimated annual cost savings of approximately \$80,000.

The fuel trucks currently owned can be sold or traded in for other needed equipment.

Budget Information:

The total amount of this contract is \$500,000, and the term of the contract is August 10, 2016 to July 31, 2019. Funds for this service/contract will come from the 2016 budget for Fleet, which has sufficient funds to pay the \$70,000 estimated to be needed in 2016. The remaining \$430,000 will be budgeted in years 2017, 2018 and 2019.

Selection of Business Partner:

In May 6, 2016, Denver Water issued a Request for Proposals (RFP) for mobile fueling via the Rocky Mountain E-Purchasing System (BidNet), the Denver Water public website, direct e-mail to the SBE/M/WBE Chamber e-mail list and to 10 known potential respondents. Denver Water received two proposals, neither of which were SBE or M/WBE.

The selection committee evaluated each proposal based on the company's experience, mobile refueling program, service level, understanding of work and pricing. Based on this criteria the evaluation team identified 1380 Management Company DBA Equipment Savers as the best vendor for this work.

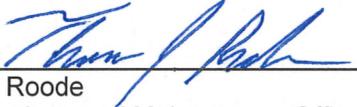
S/MWBE Information:

For 2016 O&M has set an overall 15% Target for MWBE participation in contracts.

Recommendation:

It is recommended that the Board approve Contract # 16654A with 1380 Management Company DBA Equipment Savers for refueling services for the contract period August 10, 2016 to July 31, 2019 for a total contract amount not to exceed \$500,000.

Approvals:

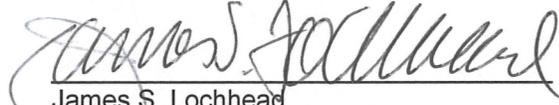


Thomas J. Roode
Chief Operations and Maintenance Officer



Angela Brimont
Chief Financial Officer

Respectfully submitted,



James S. Lochhead
CEO/Manager

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 10, 2016

Board Item: II-A-5

Tabulation of Proposals for Foothills Treatment Plant Impressed Current Cathodic Protection Systems Contract 16659A

Action by Consent

Individual Action

Summary:

FTP is Denver Water's largest treatment facility, containing large quantities of steel and ductile iron pipelines in diameters ranging from 2-inches to 132-inches. The metallic pipelines at FTP are susceptible to corrosion, and cathodic protection is used to reduce corrosion, which in turn extends the useful life of the pipelines. An impressed current cathodic protection system is used to protect the buried metallic pipelines and fittings from corrosion at FTP. The original cathodic protection systems were installed in 1982 and have reached the end of their usable life.

This project consists of providing labor, materials, and equipment to install five new impressed current cathodic protection systems that provide corrosion protection to critical pipelines at FTP. The impressed current cathodic protection systems include rectifiers, groundbeds, and corresponding electrical to provide power to the systems. Monitoring test stations will also be added to FTP piping, a critical insulating flange will be repaired on the 108-inch diameter Conduit No. 27, and anodes will be added to the fuel tanks to provide a complete corrosion protection system at the FTP. This project addresses operational reliability and mitigates risk of pipe failure due to corrosion at FTP.

Budget Information:

The 2016 Capital Improvement Plan (Business Unit 1009610013) includes \$750,000 in funds for this project, and remaining funds will be budgeted in 2017, which is currently budgeted at \$750,000.

Selection of Business Partner:

Denver Water solicited proposals from four Contractors on our Prequalified Contractors List under the General Electrical discipline. This Contract was a Quality Based Selection (QBS) and restricted proposal process using Instruction to Proposers on the QuestCDN platform. Two proposals were received on July 7, 2016, and reviewed and scored by a team of Denver Water evaluators in accordance with the QBS criteria listed in the Request for Proposals. The most responsive proposal was submitted by Guarantee Electrical Contracting of Aurora, Colorado. The Opinion of Probable Cost for the work was \$1,500,000.

Proposal Costs		
Opinion of Probable Cost	Guarantee Electrical Contracting	Ludvik Electric, Co.
\$1,500,000	\$1,625,115	\$1,695,836

S/MWBE Information:

The Minority and Women Business Enterprise (MWBE) goal established for this construction project is 3% participation. Guarantee Electrical Contracting achieved 7.94% MWBE participation.

Recommendation:

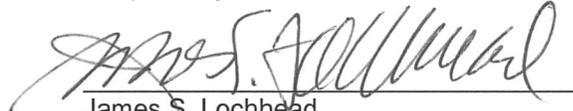
It is recommended that the Board approve Contract 16659A with Guarantee Electrical Contracting for Foothills Treatment Plant Impressed Current Cathodic Protection Systems for the contract period of July 27, 2016 through May 21, 2017 for a total contract amount not to exceed \$1,625,115.

Approvals:



Director of Engineering
Chief Engineering Officer

Respectfully submitted,



James S. Lochhead
CEO/Manager



Angela Bricmont
Chief Financial Officer

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 10, 2016

Board Item: II-A-6

Tabulation of Bids for Denver International Airport 2016 Vault Improvements Contract 16044A

Action by Consent

Individual Action

Summary:

Denver Water maintains the potable and recycled water distribution systems at DIA. This infrastructure includes approximately 200 vaults on the ramp, apron, and taxiway areas. Many of the original hatches on these vaults have had a shorter than expected useful life because of corrosion of the hinges. In addition, some of the vault lids are a low spot in the surrounding paving where water collects, accelerating the deterioration. A program has been budgeted to replace these lids and hatches over time. The project includes all labor, materials, and equipment for rebuilding six vaults to provide new hatches and improve drainage.

Budget Information:

The 2016 Capital Improvement Plan (Business Unit 2009612164) includes \$1,000,000 in funds for this project.

Selection of Business Partner:

Denver Water solicited bids from three interested Contractors. This Contract used Invitation to Bids on the QuestCDN platform. On July 21, 2016, bids were received from the three prequalified General Contractors. Bid selection was based solely on cost, and the lowest qualified bid was submitted by Interstate Highway Construction, Inc. for \$704,000. The Engineer's Opinion of Probable Cost for the work was \$750,000.

Bid Tab			
Opinion of Probable Cost	Interstate Highway Construction, Inc.	Flatiron Constructors, Inc.	R&D Pipeline Construction, Inc.
\$750,000	\$704,000	\$898,274	\$1,000,908

S/MWBE Information:

The Minority and Women Business Enterprise (MWBE) goal established for this construction project is 5% participation. Interstate Highway Construction, Inc. achieved 5.04% MWBE participation.

Recommendation:

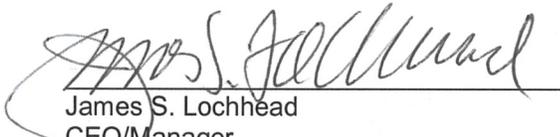
It is recommended that the Board approve Contract 16044A with Interstate Highway Construction, Inc. for the Denver International Airport 2016 Vault Improvements for the contract period of August 10, 2016 through November 18, 2016 for a total contract amount not to exceed \$704,000.

Approvals:


Robert J. Mahoney
Chief Engineering Officer


Angela Brimont
Chief Financial Officer

Respectfully submitted,


James S. Lochhead
CEO/Manager

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 10, 2016

Board Item: II-A-7

Agreement with AECOM Technical Services, Inc. for North System Renewal Water Treatment Plant (NSRWTP) Design Package #1 – Site and Civil Improvements Contract 16811A

Action by Consent

Individual Action

Summary:

The NSRWTP is a new 150 million gallons per day (MGD) facility to be constructed on Denver Water's (DW's) Ralston Reservoir property north of Golden on Colorado State Highway 93. DW is engaging a Design Team to jointly execute the design of the NSRWTP. The Design Team's responsibilities are selectively scoped and contracted in specific Design Packages (DPs) #1-7. The DPs and general scope of work are outlined below.

- **DP #1 – Site and Civil Improvements**
- DP #2 – Treatment Process Systems and Structures
- DP #3 – Electrical, Instrumentation & Control Systems
- DP #4 – Ancillary Treatment Process Systems and Structures
- DP #5 – Architectural and Building Systems
- DP #6 – Post-Tensioned Water Storage Tanks
- DP #7 – Moffat Facility Improvements

The project will be completed using a step-wise phasing approach, whereby DP contracts are only executed for specific tasks with the option to extend using six (6) tasks in order to make decisions and obtain approvals before proceeding to subsequent tasks.

NSRWTP Project Delivery Tasks	
Major Tasks	Current Schedule
Task 1: Mobilization of Owner's Rep	Complete
Task 2: Design Phase Service Procurement (Design Team and CMAR)	In-progress
Task 3: Preliminary Design (0 to 20% completion) Board Workshop at 20% Design Milestone	8/2016 – 3/2017
Task 4: Final Design (20 to 100% completion through bidding) Finalize Project Budget at 30% Design Milestone	3/2017 – 2018-2021 (varies)
Task 5: Construction	2018 – 2023
Task 6: Transfer of Facility Ownership	2023

DP #1 Consultant will be responsible for site improvements, civil engineering design, transportation and hydraulic preliminary design services for the NSRWTP.

DW has negotiated the scope and fee for DP #1 through a 20-percent level of design and will continue in a phased contract approach for future design milestones, based on the project schedule and performance. Each subsequent phase will be brought to the Board for consideration and approval.

Budget Information:

The 2016-2017 Capital Improvement Plan (Business Unit 2009612041) includes \$1,500,000 in funds for execution of NSRWTP DP #1 preliminary design phase scope of services. The current capital cost estimate for the NSRWTP is \$400M with a 30% contingency. The current 2016 budget is \$1.5M, however, based on updated projections and finalization of project delivery approach, the System Managers have increased the 2016 budget to \$6M to

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sufficiently cover the expected DP #1-6 contracts. 2017 currently has \$15.8M budgeted but the project estimate will be refined as the design progresses and a formal approval of the project budget will be requested of the Board at the 30% Design Milestone.

Selection of Business Partner:

On May 17, 2016, DW posted a formal Request for Proposals (RFP) to denverwater.org, the Daily Construction Journal and a direct email was sent to over 500 firms from DW's engineering contact list notifying potential proposers of the RFP. A mandatory pre-proposal meeting was held at the Denver Police Protection Agency Conference Room on May 26, 2016, thirty nine firms (39) attended. The Proposal Tab Table below shows DW's opinion of probable cost to complete the DP #1 preliminary design scope of work and the price proposals received from the two proposers. The proposals were received and reviewed by a team of Engineering and Operations and a quality-based selection was made and documented.

Proposal Tab		
Opinion of Probable Cost	Lowest Proposer	Second Lowest Proposer
\$1,100,000	\$821,030	\$1,131,953

The negotiated fee with the second lowest bidder and most qualified firm is \$1,050,137 which includes \$50,000 in contingency which will require Project Leadership Team approval prior to starting any contingency-based work. Preliminary design scope of services is expected to last 7 months, with an anticipated completion date of March 2017.

S/MWBE Information:

The MWBE goal for DP #1 for Preliminary and Final Design is combined 15%, this goal must be achieved through the total design of the project and will vary during different design phases. For preliminary design, a 15.1% participation was achieved.

Recommendation:

It is recommended that the Board approve Contract 16811A with AECOM Technical Services, Inc. for NSRWTP Design Package #1 – Site and Civil Improvements, Preliminary Design Phase Services for the contract period from August 10, 2016 through March 31, 2017 for a total contract amount not to exceed \$1,050,137.

Approvals:


Robert J. Mahoney
Chief Engineering Officer

Respectfully submitted,


James S. Lochhead
CEO/Manager


Thomas J. Roode
Chief Operations Maintenance Officer


Angela Brimont
Chief Finance Officer

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 10, 2016

Board Item: II-A-8

Agreement with CH2M Hill Engineers, Inc. for North System Renewal Water Treatment Plant (NSRWTP) Design Package #2 – Treatment Process Systems and Structures Contract 16836A

Action by Consent

Individual Action

Summary:

The NSRWTP is a new 150 million gallons per day (MGD) facility to be constructed on Denver Water's (DW's) Ralston Reservoir property north of Golden on Colorado State Highway 93. DW is engaging a Design Team to jointly execute the design of the NSRWTP. The Design Team's responsibilities are selectively scoped and contracted in specific Design Packages (DPs) #1-7. The DPs and general scope of work are outlined below.

- DP #1 – Site and Civil Improvements
- **DP #2 – Treatment Process Systems and Structures**
- DP #3 – Electrical, Instrumentation & Control Systems
- DP #4 – Ancillary Treatment Process Systems and Structures
- DP #5 – Architectural and Building Systems
- DP #6 – Post-Tensioned Water Storage Tanks
- DP #7 – Moffat Facility Improvements

The project will be completed using a step-wise phasing approach, whereby DP contracts are only executed for specific tasks with the option to extend using six (6) tasks in order to make decisions and obtain approvals before proceeding to subsequent tasks.

NSRWTP Project Delivery Tasks	
Major Tasks	Current Schedule
Task 1: Mobilization of Owner's Rep	Complete
Task 2: Design Phase Service Procurement (Design Team and CMAR)	In-progress
Task 3: Preliminary Design (0 to 20% completion) Board Workshop at 20% Design Milestone	8/2016 – 3/2017
Task 4: Final Design (20 to 100% completion through bidding) Finalize Project Budget at 30% Design Milestone	3/2017 – 2018-2021 (varies)
Task 5: Construction	2018 – 2023
Task 6: Transfer of Facility Ownership	2023

DP #2 Consultant will be responsible for the primary water treatment processes, including all equipment and structures associated with the headworks facility, rapid mix, flocculation, sedimentation, filtration and disinfection during the preliminary design phase services for the NSRWTP.

DW has negotiated the scope and fee for DP #2 through a 20-percent level of design and will continue in a phased contract approach for future design milestones, based on the project schedule and performance. Each subsequent phase will be brought to the Board for consideration and approval.

Budget Information:

The 2016-2017 Capital Improvement Plan (Business Unit 2009612041) includes \$1,500,000 in funds for execution of NSRWTP DP #2 preliminary design phase scope of services. The current capital cost estimate for the NSRWTP is \$400M with a 30% contingency. The current 2016 budget is \$1.5M, however, based on updated projections

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and finalization of project delivery approach, the System Managers have increased the 2016 budget to \$6M to sufficiently cover the expected DP #1-6 contracts. 2017 currently has \$15.8M budgeted but the project estimate will be refined as the design progresses and a formal approval of the project budget but will be requested of the Board at the 30% Design Milestone.

Selection of Business Partner:

On May 17, 2016, DW posted a formal Request for Proposals (RFP) to denverwater.org, the Daily Construction Journal and a direct email was sent to over 500 firms from DW's engineering contact list notifying potential proposers of the RFP. A mandatory pre-proposal meeting was held at the Denver Police Protection Agency Conference Room on May 26, 2016, thirty nine firms (39) attended. The Proposal Tab Table below shows DW's opinion of probable cost to complete the DP #2 preliminary design scope of work and the price proposals received from the two proposers. The proposals were received and reviewed by a team of Engineering and Operations and a quality-based selection was made and documented.

Proposal Tab		
Opinion of Probable Cost	Lowest Proposer	Second Lowest Proposer
\$2,500,000	\$1,103,408	\$1,701,564

The negotiated fee with the lowest bidder and most qualified firm is \$2,040,814 which includes \$97,182 in contingency which will require Project Leadership Team approval prior to starting any contingency-based work. Preliminary design scope of services is expected to last 7 months, with an anticipated completion date of March 2017.

S/MWBE Information:

The MWBE goal for DP #2 for Preliminary and Final Design combined is 2-5%, this goal must be achieved through the total design of the project and will vary during different design phases. For preliminary design, a 4.9% participation was achieved.

Recommendation:

It is recommended that the Board approve Contract 16836A with CH2M Hill Engineers, Inc. for NSRWTP Design Package #2 – Treatment Process Systems and Structures, Preliminary Design Phase Services for the contract period from August 10, 2016 through March 31, 2017 for a total contract amount not to exceed \$2,040,814.

Approvals:

Respectfully submitted,


 Robert J. Mahoney
 Chief Engineering Officer


 James S. Lochhead
 CEO/Manager


 Thomas J. Roode
 Chief Operations Maintenance Officer


 Angela Brimont
 Chief Finance Officer

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: August 10, 2016

Board Item: II-A-9

Ratification of Construction Contracts Change Orders and Amendments to Contracts/Agreements

Action by Consent

Action

Information

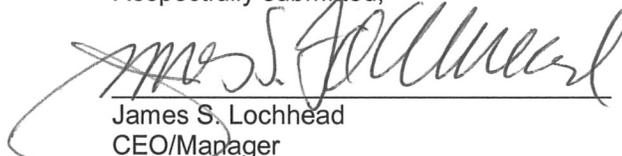
Summary:

The attached are Construction Contracts Change Orders and Amendments to Contracts/Agreements for Board ratification for June and July 2016.

Approvals:


Robert J. Mahoney
Chief Engineering Officer

Respectfully submitted,


James S. Lochhead
CEO/Manager


Angela Bricmont
Chief Financial Officer