

CIP DESIGN AND ENGINEERING MEMORANDUM
08-10

April 24, 2008

TO: Honorable Mayor Kathleen M. Novak and City Council Members

FROM: A.J. Krieger, City Manager *AK*
David Allen, Director of Public Works/Utilities *DA*
Kurt Kowar, CIP Design and Engineering Manager *KK*
Amy Ward, Civil Engineer II *AW*

SUBJECT: CR-72 Lift Station A and WWTP Odor Control Facilities

RECOMMENDATION:

Attached to this memorandum is a Resolution which, if approved would:

- 1) authorize the Mayor to execute a contract between the City of Northglenn and Velocity Constructors Inc. for the construction of the Lift Station A and WWTP Odor Control Facilities Project in the amount of \$263,120.00 with a 10% contingency of \$26,312.00;
- 2) authorize the Mayor to execute Amendment #3 with Carollo Engineers in the amount of \$20,000 to provide the on call construction administrative services for the project; and
- 3) authorize the City Manager to expend funds in the amount of \$10,000, to provide field quality control testing during construction.

The total project cost is \$319,432.00. Staff recommends approval of the proposed Resolution.

BACKGROUND:

Staff is requesting approval for the construction of the Lift Station A and WWTP Odor Control Facilities project. During the past two summers, there have been an increase in the number and frequency of odor complaints at the Wastewater Treatment Plant (WWTP). The Colorado Department of Public Health and Environment (CDPHE) became involved with the growing number of complaints and subsequently issued a Cease and Desist order. The Cease and Desist order requires the City to maintain hydrogen sulfide levels, a major component of the odors, below 100 parts per million at the influent structure of the WWTP. In order to comply with the CDPHE's stipulation, the City has elected to inject odor-reducing chemicals into the system prior to summer 2008.

In July 2007 the City hired Webster Environmental Associates, Inc. (Webster), a firm specializing in odor analysis, to complete an odor study of the City's WWTP. Webster concluded that the primary source of the odors at the WWTP is due to the City's force main pipeline. The odor study also concluded that 89% of the hydrogen sulfide gas is being released into the atmosphere originates from the first two cells of the WWTP lagoons. As a part of the study, Webster recommended adding chemicals in the force main to address the odors prior to reaching the WWTP. Webster recommended that the City conduct full scale pilot studies of different treatment chemicals to determine which chemical is best suited for the City's needs.

Webster recommended the following four chemicals for the full scale pilot studies: 1) ferric chloride (iron salt), 2) Bioxide (calcium nitrate), 3) hydrogen peroxide and 4) oxygen. On August 17, 2007, the City conducted its first full-scale pilot study using ferric chloride. Subsequent pilot studies using Bioxide were conducted in November 2007. Although the ferric chloride and Bioxide chemicals were successful in odor reduction, oxygen was identified as the least expensive long-term option based on projected capital and operational costs. However, due to the characteristics of the oxygen and hydrogen peroxide options, additional facilities need to be constructed in order to conduct full scale pilot tests using these two chemicals.

On December 13, 2007, the City Council approved an addendum to the contract between the City and Carollo Engineers to complete the design of the Lift Station A and WWTP Odor Control Facilities project. Recognizing that the City must begin injecting chemicals prior to the summer, the design includes a semi-permanent chemical system at Lift Station A as well as a chemical injection vault at the WWTP. The semi-permanent Bioxide feed system will allow the City to address the odors in the forcemain while providing the flexibility to perform additional full scale pilot testing using hydrogen peroxide and oxygen. City staff will develop a final recommendation for a permanent chemical system to control the odors at the WWTP at the conclusion of the final pilot studies.

On April 10, 2008, the City accepted four (4) bids for improvements to Lift Station A and WWTP Odor Control Facilities. The apparent low bidder is Velocity Constructors, Inc. (Velocity) with a bid of \$192,181.00. After the bid opening, Velocity discovered an error in their bid and sent a letter notifying the City of the discrepancy. The error was a result of an incorrect parameter within their calculation spreadsheet. The revised amount that Velocity is requesting is \$70,939.00 for a total contract of \$263,120.00, which would still be the apparent lowest bid. The City did not in this situation require a bid deposit, which is authorized but not required by Section 6-5-4 of the Northglenn Municipal Code.

When the error was identified, City staff consulted with the City Attorney to evaluate the City's options. The City Attorney opined that under the City's bidding procedures, the City was still authorized to negotiate and contract with Velocity since they were still the apparent lowest bid even after the revision. City staff then contacted the submitted references and determined the Contractor's past performance met the City's standards. Results of the reference checks are on file at City Hall. Based on the reference checks and review of the bid documents, City staff recommends that a contract be executed with Velocity Constructors Inc. with a revised fee of \$263,120.00 and a contingency of 10% for the construction of the Lift Station A and WWTP Odor Control Facilities project. Copies of the bid tabulation, the letter from Velocity regarding the revised bid and the standard construction agreement are attached.

Although the situation is somewhat unusual, it is in the purview of the City to contract with Velocity. However, in the event that City Council should choose to contract with the second lowest bidder, the second lowest bidder is Paramount Construction, Inc. (Paramount) with a bid of \$309,553.00. City staff has confirmed that Paramount also meets the City's standards based on the submitted references. If the City Council chooses to contract with Paramount Construction, Inc. for the amount of \$309,553.00, City staff requests the approval of a 10% contingency of \$30,956.00.

POTENTIAL OBJECTION:

City Staff is not aware of any specific opposition to the proposed Resolution.

BUDGET/TIME IMPLICATIONS:

The budget, as proposed, for the contract is \$319,432.00. Funding is available in the 2008 Capital Improvements Fund account number 516.69272.000.3999.911 in the amount of \$250,000.00 and unencumbered funds are available in account number 516.69211.000.3999.656 in the amount of \$69,432.00. Additional unencumbered funds are available in account number 516.69211.000.3999.656 for the remaining balance of \$51,077.00, if the Paramount bid is accepted.

STAFF REFERENCE:

Please contact Kurt Kowar, CIP Design and Engineering Manager at kkowar@northglenn.org, or (303) 349-3772.

SPONSORED BY: COUNCIL MEMBER MONROE

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-72
Series of 2008

Series of 2008

A RESOLUTION APPROVING THE CONSTRUCTION OF THE LIFT STATION A AND WASTEWATER TREATMENT PLANT ODOR CONTROL FACILITIES, AND AUTHORIZING THE NECESSARY CONTRACTS TO ACCOMPLISH THE PROJECT

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

Section 1. The City Council hereby approves the construction of the Lift Station A and Wastewater Treatment Plant Odor Control Facilities (the "Project"), in an amount not to exceed \$319,432, and authorizes the following expenditures to accomplish the Project:

- (a) The execution of a contract between the City and Velocity Constructors, Inc. for the construction of the Project in the amount of \$263,120, with a ten percent (10%) contingency of \$26,312 for a total amount not to exceed \$289,432; and
- (b) The execution of the Third Amendment to the contract between the City and Carollo Engineers to provide on-call construction administrative services in the amount of \$20,000; and
- (c) Expenditures by the City Manager in the amount of \$10,000 to provide for field quality control testing during construction.

DATED, at Northglenn, Colorado, this _____ day of _____ 2008.

KATHLEEN M. NOVAK
Mayor

ATTEST:

APPROVED AS TO FORM:

JOHANNA SMALL, CMC
Acting City Clerk

COREY Y. HOFFMANN
City Attorney

AGREEMENT

PROJECT NAME: Lift Station A and Wastewater Treatment Plant Odor Control Facilities

PROJECT NUMBER: IFB-2008-12 **PROJECT MANAGER:** Amy Ward

THIS AGREEMENT, made this ____ day of _____, 20__, by and between the City of Northglenn, hereinafter called "CITY", and Velocity Constructors, Inc. hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the project named:

"Lift Station A and Wastewater Treatment Plant Odor Control Facilities"

2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor supervision, and other services necessary for the completion of the PROJECT described herein.

3. The CONTRACTOR will provide performance and payment bonds and a certificate of insurance naming the City as an additional insured for purposes of said project within 10 days after the date of the NOTICE OF AWARD.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$263,120.00, or as shown in the BID schedule. The CONTRACTOR will commence the work within 7 calendar days after the date of NOTICE TO PROCEED. The CONTRACTOR will complete the work in accordance with the following dates:

The Work will be substantially completed within **180** days following NOTICE TO PROCEED and ready for final payment in accordance with the contract documents within **200** calendar days after the date of NOTICE TO PROCEED unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.

Milestone No. 1:

- All work associated with the Lift Station A site including: relocation of CITY leased chemical pump equipment and storage tank to new concrete chemical pad, completed chemical feed piping, site driveway and fence modifications and a completely operational chemical feed system at Lift Station A within **100** days following NOTICE TO PROCEED.

AGREEMENT - Page 2

5. The term "CONTRACT DOCUMENTS" means and includes all items as set forth in Section 1.01 of the General Conditions.

6. The CITY will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This AGREEMENT shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in TWO copies, each of which shall be deemed an original on the date first above written.

CITY:

City of Northglenn

By _____

Name Kathleen M. Novak

Title Mayor

ATTEST:

Name Diana L. Lentz, CMC

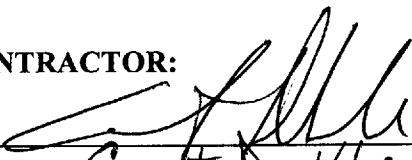
Title City Clerk

(SEAL)

APPROVED AS TO FORM:

Corey Y. Hoffman, City Attorney

CONTRACTOR:

By  _____

Name Grant Dunkle

(Please Type or Print)


Title President

Address 9852 W. Gorton Dr.

Lakewood, CO 80227

(SEAL)

ATTEST:



Name (Please Print or Type) CURTIS LUDD

Title PROJECT MANAGER

CITY's CONTRACT # _____

Amy Ward

Print Name of City's Project Manager



11April2008

Amy Ward
City of Northglenn
11701 Community Center Drive
P.O. Box 330061
Northglenn, CO 80233-8061

Re: Bid for Lift Station A and Wastewater Treatment Plant Odor Control Facilities PROJECT NUMBER IFB-2008-12

Dear Ms. Ward,

Velocity Constructors, Inc. has found some mathematical errors in our bid for the Lift Station A and Wastewater Treatment Plant Odor Control Facilities PROJECT NUMBER IFB-2008-12 that was submitted yesterday, 10April2008.

We were quite low on our bid, which caused us to review our numbers. We found a spreadsheet problem in our Excel spreadsheet program. We did not have the parameters set correctly and when it added, it left out a good part of our estimate. We can still, however, offer the City of Northglenn a substantial savings over our competitors.

This is a listing of the items that were left out of our bid:

1. The double-containment underground piping for the bioxide system at Lift Station A.
2. Asphalt patch.
3. The red valve rubber coupling joints.
4. Pipe labeling.
5. Solenoid valve – ¾"
6. The precast chemical feed manhole, with ladder-up.
7. Shoring system for the chemical manhole, and support of the 27" PCCP.
8. The supply and installation of the 15" RCP piping.



Velocity Constructors, Inc. would like to either a) revise our bid upwards \$70,939.00 for a revised bid amount of \$263,120.00, or b) withdraw our bid, and wish the City to decide which they would prefer.

To let you know our experience with these systems, we have completed two other odor control projects with the same Siemens "BioXide" systems. The owners were City of Aurora and South Adams County Water and Sanitation District. We have experienced personnel ready to start this work for you.

We apologize for the problems. Please contact me on your decision.

Respectfully,

Grant Dunkle
President



**CITY OF NORTHGLENN
FORMAL BID SUMMARY**

BID NUMBER: IFB 2008-12

PAGE 1 OF 1

BID NAME: Lift Station A & WWTP Odor Control Facilities

DEPARTMENT: WES

	Velocity Constructors Inc.	Glacier Construction	Paramount Construction Inc.	Stanek Constructors Inc.	
DATE DUE: 04/10/08	BID RECEIVED: DATE: 4/10/08 TIME: 1:58 pm	BID RECEIVED: DATE: 4/10/08 TIME: 2:00 pm	BID RECEIVED: DATE: 4/10/08 TIME: 1:54 pm	BID RECEIVED: DATE: 4/10/08 TIME: 1:49 pm	BID RECEIVED: DATE: TIME:
TIME: 2:00 P.M.					
LIFT STATION A AND WASTEWATER TREATMENT PLANT ODOR CONTROL FACILITIES					
BASE BID	\$ 192,181.00	\$ 329,900.00	\$ 309,553.00	\$ 395,000.00	
ALTERNATIVE A EI&C WORK AT LIFT STATION A	\$ 18,041.00	\$ 20,000.00	\$ 58,909.00	\$ 57,000.00	
ALTERNATIVE B - EI&C WORK AT THE WASTEWATER TREATMENT PLAN	\$ 84,426.00	\$ 18,000.00	\$ 25,680.00	\$ 70,000.00	
Total					
Addendum Acknowledged:	Yes	Yes	Yes	Yes	
Illegal Alien form submitted	Yes	Yes	Yes	Yes	

Kathleen Swamukla
Buyer

Don Small
City Clerk, Acting

4/10/08
Date

Reference Check

Project: Lift Station A and WWTP Odor Control Facilities
Consultant/Contractor: Velocity Constructors, Inc.
Date: 4/16/08
Page 1

Project Name:	Contact for Reference:	Contact Phone Number:	Reference:
Parker Water and Sanitation District Pump House	Wes Weaver	(303) 789-4111	They are a good corporation.
CTC Metro District Replacement Pump Facility	Mark Klee	(303) 741-6000	The project has gone well.
	George Summit	(720) 641-3081	Waiting for response.

AGREEMENT

PROJECT NAME: Lift Station A and Wastewater Treatment Plant Odor Control Facilities

PROJECT NUMBER: IFB-2008-12 PROJECT MANAGER: Amy Ward

THIS AGREEMENT, made this ____ day of _____, 20__, by and between the City of Northglenn, hereinafter called "CITY", and Paramount Construction, Inc. hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the project named:

"Lift Station A and Wastewater Treatment Plant Odor Control Facilities"

2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor supervision, and other services necessary for the completion of the PROJECT described herein.

3. The CONTRACTOR will provide performance and payment bonds and a certificate of insurance naming the City as an additional insured for purposes of said project within 10 days after the date of the NOTICE OF AWARD.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$309,553.00, or as shown in the BID schedule. The CONTRACTOR will commence the work within 7 calendar days after the date of NOTICE TO PROCEED. The CONTRACTOR will complete the work in accordance with the following dates:

The Work will be substantially completed within **180** days following NOTICE TO PROCEED and ready for final payment in accordance with the contract documents within **200** calendar days after the date of NOTICE TO PROCEED unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.

Milestone No. 1:

- All work associated with the Lift Station A site including: relocation of CITY leased chemical pump equipment and storage tank to new concrete chemical pad, completed chemical feed piping, site driveway and fence modifications and a completely operational chemical feed system at Lift Station A within **100** days following NOTICE TO PROCEED.

AGREEMENT - Page 2

5. The term "CONTRACT DOCUMENTS" means and includes all items as set forth in Section 1.01 of the General Conditions.

6. The CITY will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This AGREEMENT shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in TWO copies, each of which shall be deemed an original on the date first above written.

CITY:
City of Northglenn
By _____
Name Kathleen M. Novak
Title Mayor

ATTEST:

Name Diana L. Lentz, CMC
Title City Clerk

(SEAL)

APPROVED AS TO FORM:

Corey Y. Hoffman, City Attorney

CONTRACTOR: Paramount Construction, Inc.

By _____
Name Brian D. Moffitt
(Please Type or Print)

Title President
Address 4701 Jackson Street
Denver, CO 80216

(SEAL)

ATTEST:

Jennifer J. Thornton
Name (Please Print or Type)
Title Assistant Secretary

CITY'S CONTRACT # _____

Amy Ward
Print Name of City's Project Manager

Reference Check

Project: Lift Station A and WWTP Odor Control Facilities
Consultant/Contractor: Paramount Construction, Inc.
Date: 4/16/08
Page 1

Project Name:	Contact for Reference:	Contact Phone Number:	Reference:
56 th Avenue Water Storage Tank	Curtis Bauers	(720) 206-0567	They performed quite well and we were very pleased.
Castle Rock Water Tank	Robert Bates	(303) 980-1212	They are an excellent company.
Valmont Bridge	Wayne Ellis	(303) 441-3900	I highly recommend them.

ADDENDUM #3 TO AGREEMENT FOR PROFESSIONAL SERVICES

THIS THIRD ADDENDUM TO AGREEMENT FOR PROFESSIONAL SERVICES is made and entered into this ____ day of _____, 2008, by and between the CITY OF NORTHGLENN, State of Colorado (hereinafter referred to as the "City") and Carollo Engineers, P.C. (hereinafter referred to as "Consultant").

RECITALS:

A. On January 25, 2007, the City and Consultant entered into an Agreement for Professional Services for civil engineering services (the "Agreement").

B. The parties desire to supplement the Agreement with this Addendum #3 to allow for an additional scope of services for the design services for:

Exhibit A, Lift Station A and WWTP Odor Control Facilities On-Call Construction Administrative Services

AGREEMENT

NOW, THEREFORE, it is hereby agreed that for the consideration hereinafter set forth, that Consultant shall provide to the City, professional engineering services as needed in the manner provided in the Agreement.

1. The Scope of Services in the Agreement is hereby supplemented to include the scope of services for the design services attached hereto as **Exhibit A**, and incorporated herein by this reference (the "Additional Scope of Services"). Consultant shall commence work on the Additional Scope of Services within ten (10) days of the issuance of a Notice to Proceed.

2. Subparagraph A. of Article IV entitled "Compensation" is hereby amended to provide as follows:

A. Compensation shall not exceed \$20,000.00 for the work described in **Exhibit A** to this Addendum #3.

3. The original Agreement is in full force and effect and is hereby ratified by the City and the Consultant. The original Agreement, Addendum #1, Addendum #2 and this Addendum constitute all of the agreements between the City and the Consultant.

IN WITNESS WHEREOF, the parties hereto each herewith subscribe to the same in duplicate.

CITY OF NORTHGLENN, COLORADO

By: _____

Kathleen M. Novak

Title: Mayor

ATTEST:

Diana L. Lentz, City Clerk

APPROVED AS TO FORM:

Corey Y. Hoffmann, City Attorney

CONSULTANT

By:  _____

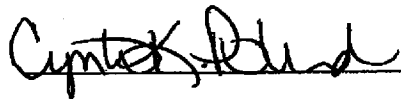
Title

Parham

4-16-08

Date

ATTEST:

 _____

Office Administrator 4/16/2008
Title Date

TASK ORDER NO. 4

**City of Northglenn, Colorado
OWNER**

AND

CAROLLO ENGINEERS, A Professional Corporation

This Task Order No. 4 is an amendment to the Agreement issued by the OWNER and accepted by ENGINEER pursuant to the mutual promises, covenants and conditions contained in the Agreement between the above named parties dated the 25th of January 2007 in connection with:

Northglenn Wastewater Treatment Plant Headworks and Lift Station A Modifications.
(Project)

PURPOSE

The purpose of this Task Order No. 4 is to:

1) The OWNER will be managing the construction of the Lift Station A and Wastewater Treatment Plant Odor Control Facilities. The OWNER will have primary responsibility in monitoring and verification that the contract is executed per the contract documents. The intent of this task order is to provide for assistance to support the City in resolving construction issues on a limited on-call basis.

ENGINEER'S SERVICES

The scope of this Task Order No. 4 includes the following:

Task 1 On-Call Engineering Services During Construction

The ENGINEER will assist the OWNER upon the OWNER's request on a limited basis during construction. Services during construction may include:

- 1) Review of selected critical shop drawings
- 2) Response to selected critical contractor Requests for Information
- 3) Limited site visits during construction
- 4) Assistance in the review of change orders

TIME OF PERFORMANCE

Services associated with this task order shall be complete when the not to exceed dollar limit is reached. Construction is anticipated to be completed on or before December 1, 2008.

PAYMENT

ENGINEER will perform work as requested by the OWNER per this Task Order No. 4 on a time and materials basis up and to a not-to-exceed \$20,000. Hourly rates for various labor categories used for this project shall be as described in the attached FEE SCHEDULE.

**CAROLLO ENGINEERS, PC
FEE SCHEDULE**

As of March 1, 2008

	<u>Hourly Rate</u>
Engineers/Scientists	
Assistant Professional	\$125.00
Professional	158.00
Project Professional	189.00
Lead Project Professional	205.00
Senior Professional	226.00
Senior Process Specialist	315.00
Technicians	
Technicians	95.00
Senior Technicians	137.00
Support Staff	
Document Processing / Clerical	81.00
Project Equipment Communication Expense (PECE) Per DL Hour	9.00
Other Direct Expenses	
Travel and Subsistence	at cost
Mileage	.505/mile
Subconsultant	cost + 10%
Other Direct Cost	cost + 10%
Expert Witness	Rate x 2.0

This fee schedule is subject to annual revisions due to labor adjustments.