AMENDMENT TO AGREEMENT BETWEEN CITY OF RENO, CITY OF SPARKS AND CH2M HILL

This Amendment, made this 10 44 day of 6 CTOBET, 2012, by and between CH2M HILL ENGINEERS, INC., herein referred to as "ENGINEER" and CITY OF RENO AND CITY OF SPARKS, herein referred to as "CLIENT", hereby amends the Agreement between ENGINEER and CLIENT made and entered into on February 22, 2012, herein referred to as Basic Agreement.

WHEREAS, CLIENT and ENGINEER entered into an Agreement for services on February 22, 2012, for engineering and consulting services for the Truckee Meadows Water Reclamation Facility Solids Dewatering Project, hereinafter referred to as "Project";

WHEREAS, the CLIENT has requested a revised and modified scope of work for engineering and consulting services for the Project; and

Now, therefore CLIENT and ENGINEER for considerations hereinafter set forth, mutually agree as follows:

<u>ARTICLE II – SCOPE OF SERVICES</u> is amended as follows:

The additions and changes to the Scope of Services is set forth in Exhibit A which attached hereto and incorporated herein by this reference. Exhibit A consists of 5 pages.

<u>ARTICLE III - COMPENSATION</u> is amended as follows:

- A. Compensation to the ENGINEER shall be on a time and expense basis for the engineering services performed in accordance with Exhibit A to this Amendment which is attached hereto.
- D. The total authorized fee is increased by the sum of \$142,000.00 to the sum of \$642,000.00 from the original sum of \$500,000.00. The total budget for services authorized by this Amendment to Agreement is \$642,000.00 and shall not be exceeded without authorization of the CLIENT. The City of Reno's share is the sum of \$440,604.60 and the City of Sparks' share is the sum of \$201,395.40. The budget may be increased by amendment hereto if necessitated by a change in scope of services which increases the cost of providing the services. ENGINEER is not authorized to provide any additional services beyond the scope of work without having authorized funding pursuant to a written amendment hereto signed by the authorized representative of the governing body.

<u>ARTICLE IV - SCHEDULE OF WORK</u> - is hereby amended as follows:

ENGINEER will proceed in accordance with the schedule of work for the added and revised tasks as set forth in Exhibit A attached hereto and incorporated herein by this reference.

The February 22, 2012, Basic Agreement is incorporated herein by this reference, unless inconsistent with the terms set forth herein or unless otherwise stated.

IN WITNESS WHEREOF, CLIENT has caused these presents to be executed by its officers hereunto duly authorized and the ENGINEER has subscribed same, all on the day and year first above written.

By: PAUE AIA72; For Robert A. Cashell, Sr., Mayor APPROVED AS TO FORM: By: Susan Ball Rothe Deputy City Attorney	By: MMHM MAN Lynhette Jones, City Clerk RENO SERVEY	
CITY OF SPARKS	WHOE COULD	V
By: Geno Martini, Mayor APPROVED AS TO FORM:	By:Sparks City Clerk	MANAGEMENT AND
By: Chet Adams, Sparks City Attorney		
CH2M Hill Engineers, Inc.		

Vice President
Cynthia M. Pothr

Amendment 1 to the Scope of Work for the Truckee Meadows Water Reclamation Facility Solids Dewatering Project

Prepared for City of Reno, Nevada

September 2012

CH2NHILL. 50 West Liberty, Suite 205 Reno, NV 89501

Amendment 1 to the Scope of Work for the Truckee Meadows Water Reclamation Facility Solids Dewatering Project

This Exhibit A Amendment 1 is to the Agreement, between CH2M HILL ENGINEERS, Inc. (Consultant), and the City of Reno (City), for engineering and consulting services related to dewatering facilities at the Truckee Meadows Water Reclamation Facility (TMWRF, Plant).

Introduction

The primary objective of this project is to identify dewatering system improvements to improve reliability, simplify operation, reduce required maintenance, reduce operating costs, and maximize the life of solids handling facilities at the TWMRF.

This exhibit presents Consultant's scope of work, preliminary schedule, and associated budgets for the Solids Dewatering project engineering and design services. Services During Construction for the Solids Dewatering project will be contracted under separate Agreement(s).

Consultant's Scope of Work

Amendment 1 replaces Task 5, Task 6, and Task 7 from the original scope of work in their entirety with the following Tasks.

Task 5 - Control System Field Investigations

Consultant will perform field investigations to verify existing dewatering facility control wiring in place for monitoring and control of existing equipment. Field wiring will be labeled so that design for replacement controls can take place as part of the near-term improvements detailed design (Task 6).

Similarly, the existing dewatering facility control strategies will be documented and discussed so that new controls can be configured properly and that automation of processes can be implemented as appropriate.

Deliverables

- As-Built Schematic Sketch (11-inch by 17-inch)
- Existing control strategies draft Technical Memorandum
- Field Notes/Photos

Task 6 – Near-term Improvements - Detailed Design

Consultant will follow a multiphase process for the development of one detailed set of Bid Documents for the selected Near-term Improvements project. The final design process includes deliverables for each subtask for review that will allow for resolution of key issues before proceeding to the next phase. Therefore, this task will consist of three subtasks: 50 Percent Design, 90 Percent Design, and Bid Document Preparation (100 Percent). The

information collected and the concepts defined in each subtask will form the basis for subsequent work.

Each subtask will include specific deliverables as listed therein. QA/QC reviews will be conducted to monitor the quality of the Project at critical design milestones. Consultant assumes that City's consolidated written review comments will be submitted to Consultant within one week after each design submittal identified herein.

Contract Documents will be prepared for a single lump sum bid where a single General Contractor will furnish all equipment, materials, and labor necessary to construct the Project. The Contract Documents will consist of Consultant-furnished Bidding Requirements (including City-furnished Supplemental sections), General Conditions, Supplementary Conditions, General Requirements (Division 1), and Technical Specifications (Construction Specifications Institute MasterFormat 2004), Standard Details, and Drawings. Specifications, Standard Details, and Drawings will be stamped in accordance with Nevada law and signed by licensed engineers of the appropriate disciplines. Contract forms will be provided by the City. For budgeting purposes, it is assumed that the Near-term Improvements project will consist of approximately 38 sheets total (including the cover, legends, and details).

Construction Cost Estimates

Consultant will furnish construction cost estimating services as indicated below under Deliverables for the 50 Percent and 100 Percent Submittals. Estimates will be prepared to a level of accuracy based on the information available, within normal industry standards. Estimates will be formatted in accordance with the Project design Construction Specifications Institute (CSI) specification format and segregated by facility. Where sufficiently detailed information is lacking to obtain reasonably accurate quantities of materials, allowances will be used to provide an opinion of the estimated construction costs at the midpoint of construction. Cost estimates and levels of accuracy (Class level) will conform to American Association of Cost Engineering International, AACE Recommended Practice No. 18R-97.

Subtask 6.1 – 50 Percent Design

In this subtask, the preliminary design engineering decisions will be further developed. Structures, equipment, major plant piping, process, demolition, instrumentation and control concepts, electrical, and site plans will be developed during this phase to allow final detailing during the next phase of design.

The 50 percent design is intended to show the major design concepts and features of the Project. The submittal will include a preliminary specifications table of contents. Documents submitted will be reviewed by Consultant's QC team concurrent with the City's review. Consultant will collect the City's consolidated written review comments during a regularly scheduled bi-weekly status call. Consultant will incorporate comments into the 90 percent design as appropriate.

Deliverables

- 50 Percent Submittal 5 copies of half-size 50% construction drawings (11-inch by 17-inch), draft specifications for major equipment, and unbound specifications table of contents
- 50 Percent Construction Cost Estimate Consultant will furnish City with a Class 3
 estimate of construction costs at the 50 percent design completion level
- Review Workshop Notes

Subtask 6.2 – 90 Percent Design

Consultant will prepare 90 percent complete Bid Documents, which will be the basis for the final review submittal. This submittal will include the Bidding Requirements, Contract Forms, Conditions of the Contract, General Requirements, Technical Specifications (CSI MasterFormat 2004), Standard Details, and Drawings necessary for bidding the construction contract. The Bid Documents will include the applicable general, demolition, structural, structural/mechanical, mechanical, instrumentation and control, and electrical technical specifications, standard details, and design drawings necessary for permitting, bidding, and construction.

The 90 percent submittal is intended to be a near final version of all construction drawings, standard details, and technical specifications that will be included in the Bid Documents. It will be reviewed by Consultant's QC team and revised accordingly prior to submitting to the City for review.

90 Percent Submittal Review – Consultant will provide the 90 percent design submittal for review by the City. Consultant will conduct a review meeting with the City one week after the delivery to gather final consolidated written comments.

90 Percent NDEP Submittal – Consultant will provide one copy of half-size plans and specs to NDEP for review and approval. The submittal will be accompanied by a checklist for compliance with the *Ten States Standards* recommended standards for wastewater facilities as applicable to the design elements for this near-term project.

Deliverables

- 90 Percent Submittal 5 copies of half-size construction drawings (11-inch by 17-inch), standard details (11-inch by 17-inch), and specifications (8-1/2-inch by 11-inch) will be delivered to the City for review and comment.
- 90 Percent NDEP Submittal 1 copy of half-size construction drawings (11-inch by 17-inch), standard details (11-inch by 17-inch), and specifications (8-1/2-inch by 11-inch) will be delivered to NDEP for review and comment.

Subtask 6.3 - Quality Control Review, Coordination, and Response

Consultant will implement and carry out a quality control (QC) program. The review process includes coordinating the participation of senior reviewers at appropriate points in the Project as noted above. Consultant will perform multidisciplinary internal QC review activities using a senior review team during the progress of the final design. QC review activities will be governed by the requirements of an overall Project Quality Management Plan. All design documents will be reviewed by assigned QC reviewers, comments

addressed, and changes incorporated, prior to submission to the City for review. Project deliverables will be reviewed from the perspective of sound engineering design, constructability, construction cost, operability, and maintainability.

Task 6.4 – Final Plans and Specifications (100 Percent)

Following receipt of the City's review comments on the 90 percent submittal, Consultant will address and incorporate changes, and prepare the 100 percent complete plans and specifications for Bidding and for Permit Review. Consultant will deliver the Plans and Specifications to the City for submission to the Building and Fire departments as required. City will be responsible for fees associated with department review.

Deliverables

- Three (3) hard copy sets to City for submission to City Building Department of the 100 percent submittal, including full-size construction drawings (22-inch by 34-inch), standard details (8-1/2-inch by 11-inch), and technical specifications (8-1/2-inch by 11-inch).
- Four (4) hard copy sets to City of the 100 percent submittal, including full-size construction drawings (22-inch by 34-inch), half-size construction drawings (11-inch by 17-inch), standard details (8-1/2-inch by 11-inch), and technical specifications (8-1/2-inch by 11-inch)
- Two (2) CDs containing technical specifications, standard details, and full-size and halfsize drawings in Adobe Acrobat .pdf file format.
- Engineer's Cost Estimate Consultant will prepare a Class 1 "Engineer's Cost Estimate" of construction costs for the Project and will submit a summary of the cost estimate to the City within 2 weeks after the final plans and technical specifications are submitted.

Task 7 - Control Systems Integration Wiring

Consultant will provide point-to-point control wiring diagrams to be included in the construction bid package. This will eliminate the need for the Contractor to provide design for same. It is anticipated this work will required a total of 4-5 drawings. Drawings will be included in the 90% and 100% submittals for the Near-term Improvements Project.

Task 8 – Bid Services

Consultant will furnish the following services under this Task for the Near-term Improvements Project.

Consultant will attend and conduct, in conjunction with the City, one pre-bid conference at the Project site. Consultant will record all questions and requests for additional technical information.

Consultant will receive, log, and respond to potential Bidders' technical questions and requests for additional information, as forwarded to Consultant by City. Consultant will furnish technical interpretation of the contract documents and will prepare responses to questions in the form of addenda distributed by City to all plan holders.

Consultant will assist the City as requested in reviewing the low bid received to verify that it is complete and responsive as submitted. This task does not include attendance by the Consultant at the Bid Opening.

Preliminary Milestone Schedule

Milestone	Target Start	Target Finish
Task 4 – Long-term Alternatives Evaluation	on-going	12/13/12
Task 5 – Control System Field Investigations	8/27/12	9/21/12
Task 6 – Near-term Improvements Final Design	9/4/12	1/14/13
Task 7 - Control System Integration Wiring	10/23/12	1/9/13
Task 8 – Bid Services	1/9/13	02/20/13

All work under this Agreement is expected to be completed by March 1, 2013. If the work is delayed beyond the reasonable control of Consultant, Consultant reserves the right to request a scope and fee modification for additional administrative and support time.

Compensation

The total authorized fee shall be increased by \$142,000 from \$500,000 to \$642,000 to account for the required field investigations, increased design efforts, and the added systems integration work. The revised fee estimate is shown in Table 1 below. City understands and agrees that individual tasks may be completed either under or over budget and that Consultant can reallocate budgets within and across tasks provided the total authorized estimated fee is not exceeded.

TABLE 1
FEE ESTIMATE SUMMARY

	THIATE SOMMANT		
Task	Description		Estimated Fee (\$)
1	Project Management		58,000
2	Dewatering Facility Assessment		73,000
3	Near-term Improvements Project Definition		25,000
4	Long-term Improvement Alternatives		115,000
5	Control System Field Investigations		30,000
6	Near-term Improvements Detailed Design		287,000
7	Control System Integration Wiring		40,000
8	Bid Services		14,000
		Total	\$642,000