AMENDMENT TO AGREEMENT BETWEEN CITY OF RENO, CITYOF SPARKS AND STANTEC CONSULTING SERVICES, INC.

This Amendment, made this	day of	, 2015, by and between
Stantec Consulting Services, Inc., herein	referred to as "I	ENGINEER" and CITY OF RENO and
CITY OF SPARKS herein referred to as	"CLIENT", here	eby amends the Agreement between
ENGINEER and CLIENT made and enter	ered into on Sept	tember 25, 2013, herein referred to as
Basic Agreement:	-	

WHEREAS, CLIENT and ENGINEER entered into an Agreement for services on September 25, 2013 for engineering and support services for the TMWRF Headworks Near-term Project, referred to as "Project";

WHEREAS, the CLIENT has requested additional engineering support services for design modifications and project management during the construction of the Project;

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

ARTICLE I – SERVICES is amended to add the following sentence:

ENGINEER is subject to NRS 338.010 – 338.090 (prevailing wage) for all covered work.

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

The Scope of Services is set forth in Exhibit A which attached hereto and incorporated herein by this reference. Exhibit A consists of 9 pages.

ARTICLE III – COMPENSATION is amended as follows:

- A. Compensation to the ENGINEER for the engineering services performed in accordance with Exhibit A and this Amendment is on a time and expense basis for a total sum not to exceed \$838,826.00. The City of Reno's share is the sum of \$575,686.28 and the City of Spark's share is the sum of \$263,139.72.
- D. The budget for total charges for services authorized by this Amendment to Agreement is \$1,472,528.00 and shall not be exceeded without authorization of the CLIENT. The City of Reno's share is the sum of \$1,010,596.28 and the City of Spark's share is the sum of \$461,931.72. 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 approved and signed by the authorized representatives of the governing bodies.

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

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

<u>ARTICLE VIII – NOTICE</u> - is amended as follows:

To: Engineer
Mike Wilkin, P.E.
Principal
Stantec Consulting Services, Inc.
6995 Sierra Center Parkway, Suite 200
Reno, NV 89511-2279

The terms of the September 25, 2013 Basic Agreement are incorporated herein by this reference, unless inconsistent with the terms set forth herein or unless otherwise stated. If there are any inconsistencies, the terms specified above shall prevail.

If there are any inconsistencies between the terms of this Amended Agreement and Exhibit A, the terms specified above shall prevail.

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.

CITY OF RENO, NEVADA	CITYOF SPARKS, NEVADA						
By:Hillary L. Schieve, Mayor	By:Geno Martini, Mayor						
ATTEST:	ATTEST:						
Reno City Clerk	Sparks City Clerk						
APPROVED AS TO FORM:	APPROVED AS TO FORM:						
By: Susan Ball Rothe Deputy City Attorney	By:Sparks City Attorney						
STANTEC							
By:Mike Wilkin, P.E., Principal							

Stantec Consulting Services Inc.



6995 Sierra Center Parkway, Suite 200 Reno NV 89511-2279 Tel: (775) 850-0777 Fax: (775) 850-0787

EXHIBIT A

December 18, 2014

Attention: David Kershaw, PE

City of Reno 1 East First Street Reno NV 89501

Dear David,

Reference: Amendment to 2014 TMWRF Headworks Project Scope of Work for Design Modifications and to Provide Services During Construction

INTRODUCTION

This Amendment for Consultant Services with Stantec Consulting Inc. modifies the existing design contract for the 2014 TMWRF Headworks Near-Term Improvement Project, dated September 25, 2013. This amendment includes tasks to provide for construction administration and engineering services during the construction process, and a task to address additional design services for modifications that occurred during the design process.

The provision for construction administration services is based on the contract duration of 360 calendar days. The contract amendment to the scope of services would provide for project management, engineering services during construction, and construction administration and observation. This scope also includes several important additional special services including IBC required Special Inspections, materials testing, preparation of an Operations & Maintenance Manual, developing special equipment process control descriptions, and developing tagging modifications for existing equipment in the Headworks. A contingency for additional work at the City's request is also included. The total fee for the Amendment is not to exceed \$838,826. A detailed staff hour and cost estimate spreadsheet for each task is attached along with a 2015 discounted fee schedule (Attachment A). The staff assignments and budgets for individual sub-tasks are estimates only, and Stantec reserves the right to adjust the staffing and allocation as needed as long as the overall budget is not exceeded.

Stantec appreciates the opportunity to perform this work and is providing the Cities of Reno and Sparks a **5% discount** from our normal billing rates for all staff rates.

The detailed task amendments requested are as follows:

TASK 15 - CONSTRUCTION PROJECT MANAGEMENT

This task includes administration, coordination, and office support services to manage the project. The man-hour estimate is based on a total of 16 progress billings, and preparation of a monthly project status memo and summary describing the budget status of the various tasks.



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Reference: Amendment to Scope of Work for TMWRF Headworks Project

TASK 16 - CONSTRUCTION OFFICE ADMINISTRATION

Stantec's design team will coordinate with the City and Construction Manager to answer questions, explain/interpret the construction documents, and discuss construction related issues as they arise. Stantec will provide the following engineering services during construction:

1. Review Contractor Submittals

Contractor submittals will be reviewed for compliance with the contract documents and design intent. Submittals with appropriate marks and/or comments will be returned to the Contractor and the City. Stantec estimates a maximum of 90 submittals.

2. Respond to Requests for Information and Issue Field Change Notices

Requests for Information (RFIs) by the Contractor will be answered in a timely manner. As needed, clarifications and/or explanations of the contract documents will be provided to the Contractor in the form of a Field Change Notice (FCN). Stantec estimates a maximum of 100 formal and informal RFI's and FCN's will be required. The number of RFI's and FCN's often depends on the competency and management approach of the contractor, which is beyond the control of Stantec or the City of Reno. RFI's and FCN's in excess of 100 can be provided on a time and expense basis.

3. Assist in the Preparation and Review of Requests for Quotation and Extra Work Orders

Stantec's design team will assist the City and the Construction Manager in the preparation of Requests For Quotation (RFQs) and Extra Work Orders (EWO). Stantec's design team will evaluate the RFQ responses and make appropriate recommendations to the City for required Extra Work Order language or backup information. Stantec estimates a maximum of thirty (30) quotation requests and extra work orders will be processed.

4. Payment Applications

Stantec's staff will review Contractor payment applications and provide recommendations for payment to the City. Stantec estimates a maximum of thirteen (13) monthly payment applications.

5. Preconstruction Meeting

Stantec staff will prepare an agenda, conduct the Preconstruction Conference, and issue meeting minutes. Stantec team members expected to attend in person will include the project manager, construction manager, inspector, electrical designer, and key subconsultants. Additional personnel, such as the odor control specialists, may attend via telephone conference call. Following the meeting, Stantec will prepare minutes and distribute them to attendees.

6. On-Site Meetings & Field Visits

Stantec will conduct on-site meetings as requested by the City and/or the Contractor. It is assumed that there will be a maximum of 40 regular project meetings, typically conducted every 2 weeks. Stantec will prepare and distribute discussion notes for the regular progress meetings. Notes will include a brief documentation of key decisions and a summary of action items, rather than detailed minutes. It is anticipated that Stantec's out-of-town Electrical Engineer and odor control specialists will attend appropriate project meetings via telephone



David Kershaw, PE

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Reference: Amendment to Scope of Work for TMWRF Headworks Project

conference call, and each will make up to two site visits as necessary during the progress of the project.

TASK 17 - CONSTRUCTION FIELD ADMINISTRATION

Stantec's Construction Administration team in our Reno office will provide the following field services:

1. Construction Observation Services

The purpose of this task is to provide observation to monitor job progress and compliance with the contract documents. The overall construction observation effort will be primarily part-time, with limited periods of full-time observation and coordination during crucial construction periods. Parties to this Agreement acknowledge that due to the nature of part-time observation not all work will be visually observed. Stantec will prioritize field observation based on the Contractor's phases of work, with a higher priority being placed on observing the installation of underground utilities and periods of complex above-ground work activities where we expect significant coordination with TMWRF operations. Construction Observers will prepare daily field reports complete with digital photo documentation and submit electronic PDF copies to the City at the end of the project and upon request. Construction Observers will coordinate materials testing and inspection operations by Stantec's material testing and inspection subconsultant and the specialty coating subconsultant.

- a. Stantec estimates full-time observation at 8 hours/day for 130 working days.
- b. Stantec estimates part-time observation at 5 hours/day for 110 working days, assuming that the contractor will spend the early part of the project preparing submittals and will not begin significant field work until 30 calendar days after receiving the Notice to Proceed.

2. Specialized Site Visits

Specialized Site Visits will be provided by the senior project design staff at appropriate levels. These are expected to include the chief structural designer (Priyatosh Ray), the design manager (Ray Kruth), and a representative from the Stantec odor control design team (Joe Uglevich or Lauren Hertel).

3. Construction Manager Coordination

The purpose of this task is to provide a Construction Manager to coordinate with the Contractor, City staff, TMWRF, and design staff and will manage the Stantec field staff and specialty inspectors. Coordination will include periodic site visits as needed in support of the design staff for processing RFI's, RFQs, EWO's, and FCN's. The Construction Manager will also monitor the project construction schedule with the contractor and function as the primary contact for routing, documenting, and distributing project communications.

The Staffing level for the Construction Manager is estimated at 10 hours per week for 52 weeks.



TASK 18 - PROJECT CLOSEOUT

Stantec will provide the following services for project closeout:

1. Final Inspection

Upon substantial completion of the project and written request from the Contractor, the Construction Manager will coordinate a final inspection project walkthrough with representatives of the Contractor, Stantec designers, City staff, and TMWRF staff and will prepare a list of corrective items not in conformance with the contract drawings.

2. Prepare Record Drawings

Based on construction details and changes recorded by the Contractor, Stantec will prepare final record drawings. One set of full size final record drawings will be provided to the City in PDF format.

3. Project Closeout Documentation & Filing

Stantec will coordinate with the Contractor and Special Inspection firm to finalize the Building Permit and provide closeout documentation to the City. Stantec will provide a minimum of two hard copies and one PDF copy of all documentation to the City.

4. Operation and Maintenance Manual

Stantec will prepare operations and maintenance manual descriptions for the headworks bar screens, diversion box, and odor control equipment, and provide one copy in PDF format.

TASK 19 - SPECIAL CONSTRUCTION SERVICES

Stantec will provide the following special services:

1. Materials Testing and IBC Special Inspections

Materials testing and special inspections will be provided by Construction Materials Engineers (CME) as a subconsultant to Stantec. CME will perform the inspections required by the City of Sparks and the Structural Engineer for compliance with the Building Permit. Specific materials testing and special inspections will include soils compaction, asphaltic pavement, structural masonry, reinforced concrete, and structural bolting. A wet-stamped and signed final report of special inspections will be provided to the building official at the end of the project. Where activities are subject to prevailing wage requirements, CME will pay employees prevailing wages in accordance with Nevada Revised Statutes (NRS) sections 338.010 through 338.090.

2. Architectural Assistance

The architectural design services were provided by BJG Associates. They will provide construction assistance consisting of submittal review for their portion of the work, site visits, and building permit assistance.

3. Mechanical HVAC Assistance.

CR Engineering provided the mechanical HVAC design services for the project, and under this task they will provide submittal review for their portion of the project, as well as site visits and



startup assistance with the HVAC systems.

4. Specialty Coatings Inspection

This project incorporates significant effort to repair the existing concrete and install new high performance coatings. As part of the project team, Stantec will provide NACE certified specialized coatings inspection services from Bay Area Coating Consultants (BACC). The specialty coating inspection fee is based on 320 hours of inspection, with a 4-hour minimum per day. The duration of the specialty coatings work is unknown and depends on the contractor's work sequence and efficiency. Additional inspection hours can be provided on a time-and-materials basis at BACC's current hourly rate.

5. Surveying

Stantec will provide one set of construction survey baseline controls near the construction site and a surveyed elevation for the diversion box. Surveying does not include grade staking or individual structure surveying, which is to be provided by the Contractor. The Contractor shall provide all other surveying necessary for completion of the construction.

6. Prepare Process Control Descriptions

In this task, Stantec will prepare detailed process control descriptions for the new and existing equipment shown on the Process and Instrumentation Diagrams (P&ID's) including the following systems:

- a. Bar Screen Operation.
- b. Odor Control System Operation
- c. Influent Flow Throttling, using sluice gates
- d. Automatic Sampling System
- e. Influent Pumps
- f. Electric Isolation Gates
- g. HVAC system (by CR Engineering)

7. Revise Equipment Tags in Headworks

In this task, Stantec will research and provide a list of proposed new tag numbers for the existing equipment in the headworks, including the existing pumps and controls. This list will be reviewed with the TMWRF staff, and possibly provided to the Contractor for installation as part of the project.

8. Revise Process and Instrumentation Diagrams

TMWRF is in the process of standardizing the format of their Process and Instrumentation Diagrams (P&ID's) and the format is expected to be finalized during the construction period. This subtask will cover the cost to revise the P&ID's so that they comply with TMWRF's standard format.



TASK 20 - FINAL DESIGN MODIFICATIONS

During the final stages of the project design, significant changes were made to the project at the request of the client that resulted in additional design costs being incurred by Stantec. These items have been described in detail separately in a letter dated Nov. 7, 2014.

It should be noted that these design revisions evolved during the detailed design process, and produced a significantly better project. These were items that had not been considered when the design scope was originally prepared. The diversion box was added after the CFD modeling identified that the discharge from the two return flow pipelines was severely affecting the pumps. The new box distributes the return flow evenly, and will produce better influent flow distribution through the plant. The temporary bar screen and detailed operation descriptions were developed after long discussion with TMWRF staff on how the project could actually be implemented. These are tough issues, since the plant must continue to treat sewage during the new construction. The enclosure of the new bar screens within a building will extend the life of the expensive equipment by years, and also provides for odor control of the screened material. The addition of a new sampling system will provide better influent flow data and assist with optimization of other plant processes. The impact of all of these items was reflected in the tight bid grouping, with four bids received within a range of 11%, and all near the engineer's estimate.

A summary of the design changes and their associated cost impact is included below:

Stage of Design Process	Description	Requested Design Increase Amount
Preliminary Design Review (50%) Workshop Changes	Add return flow diversion box, enlarge building, modify odor control system, evaluate pre-purchase of screens	\$38,000
90% Design Level Modifications	Add temporary bar screen, add construction sequence descriptions, add demolition of equipment in screen room, add for lift access to equipment room, add auto sampler provisions, add additional plan review submittal at 100% level	\$37,000
100% Plan Review Modifications	Revise auto sampler system, add air monitors, modify odor control system	\$5,000
Total		\$80,000

TASK 21 - CONTINGENCY

Stantec has included a budget allowance of \$70,000 to address additional project scope items. These additional project scope items are limited to activities that would support completion of the project. At the request of the City of Reno project manager, Stantec will prepare a written task order request to obtain



authorization to proceed with the additional scope of services request. These funds will be expended on a time and materials basis, and only upon receipt of written or email approval by the City.

SUMMARY OF COST BREAKDOWN

Attachment A is a summary of the estimated staff hours and the costs associated with each of the tasks.

SCHEDULE AND BUDGET

Services under this agreement will begin immediately after approval of this contract by the City. Work will be performed on a time and materials basis. The attached staff hour and cost estimate budget spreadsheet assumes a construction schedule of 360 calendar days / 260 working days. Staffing levels and budgets are estimates based on a competent Contractor with a qualified work force completing the contract within 360 calendar days. Additional costs for construction management services may be required for construction work that extends beyond this schedule.

As a reference, Stantec's 2015 Fee Schedule is attached. Stantec appreciates the opportunity to provide this Scope of Work to the City.

Regards,

STANTEC CONSULTING SERVICES INC.

Roy Johnson, P.E.

Senior Engineer/Construction Manager

Phone: 775-722-6334

roy.johnson@stantec.com

Attachment: Staff & Hour Estimate

Mike Wilkin, PE

Principal

Tel: (775) 398-1234

Mike.Wilkin@Stantec.com

Michaelwelkin

Stantec Consulting Services Inc.



6995 Sierra Center Parkway, Suite 200 Reno NV 89511-2279 Tel: (775) 850-0777 Fax: (775) 850-0787

ATTACHMENT A

					TRUE STATE		Staff H	ours at Indic	ated Rate							Sea Maria			Cost, \$		
	Control Specialist (Uglevich)	Senior Structural Engineer (P. Ray)	Principal (Wilkin)	Senior Electrical Engineer (Hoang)	Engineer (Johnson, Buzzone)	Project Manager (Kruth)	Senior Construction Manager Johnson, Diegle)	Level 12 (Barnes)	Engineer Level 10 (Hertel)	(Angst)	Surveying	(Morales)	(Pepe)	Drafter (Hillman)	Admin Level 5 (Kaltenbach)	Labor	Expen	ses	Sub- onsultants	Continger	cy Total
Rate \$/hr	\$ 233,70	\$ 181.45	\$ 181.45	S 181.45	S 171.95	\$ 171.95	\$ 159.60	\$ 149.15	\$ 126,35	\$ 149.15	\$ 149,15	\$ 136.80	\$ 115.00	\$ 108.30	\$ 84.55		1	-			
ask 15 - Construction Project Management	4	4	8	4	104	44	0	0	0	0	0	0	0	0	120	\$ 39,433	s	- \$	-	s -	\$ 39,4
ask 16 - Office Administration	8	328	0	94	236	100	0	164	80	150	0	0	40	40	40	\$205,472	\$ 3,5	900 \$	-	\$ -	\$ 209,3
ask 17 - Field Inspection	0	32	0	0	c	24	520	c	24	0	c	0	1,590	0	0	\$ 278,808	\$ 1,5	500 \$	-	\$ -	\$ 280,3
ask 18 - Project Closeout	0	8	0	8	52	48	0	16	16	80	c	0	16	120	8	\$ 51,951	\$ 1.0	000 \$	*	s -	\$ 52,9
ask 19 - Special Services Subcontractor - CME Material Testing & IBC Inspection	,		,] ,					,					s -			30,900	s .	\$ 30.9
Subcontractor - BJG Structural Subcontractor - CR Engineering	0	0	0	0				0	0	0		0	0	0	0	s -	S	. 3	8,800 3,300	\$ -	\$ 8,80
Subcontractor - BACC specialty coatings	0	0	0	0			0		0	0	0	0	0	0	0	\$ - \$ 5.966	S	- 5			\$ 35,2
Surveying Prepare Process Control Descriptions	0	0	0	16		36	0	0	0	18	0	0	0	0	0	\$ 11,778 \$ 3,762	5	- 5	1,950	s -	\$ 5,96 \$ 13,72 \$ 3,76
Revise Equipment Tags Revise P & ID Drawings	0	0	0	4	0	4	0	0	0	0	0	8	0	24		\$ 5,107	5	- 5	:	\$ -	\$ 5,10
Subtotal Task 20	0	0	0	20	8	40	0	0	0	34	40	8	0	24	0	\$ 26,613	\$	- \$	80,150	\$ -	\$106,76
ask 20 - Design Modifications	0	0	0	0	0	140	0	188	0	186	0	0	0	0	2	\$ 80,000	\$. \$	-	s -	\$ 80,0
ask 21 - Construction Contingency	0	0	0	0	0	0	0	0	0	0	0	0	0	0		s -	-	- \$			0 \$ 70.0
Subtotal	12	372	8	126	400	396	520	368	120	450	40	8	1,646	184	170	\$682,276	\$ 6,4	00 \$	80,150	\$ 70,0	00 \$838,83



STANTEC CONSULTING SERVICES INC. - Reno Office

STANDARD FEE SCHEDULE

2015

(Discounted 5% for TMWRF 2015 Projects)

Listed herein is a schedule of fees for engineering, planning and surveying services most frequently performed by Stantec Consulting Services Inc.

Invoices will be submitted on completion of a project and become due on presentation. For jobs lasting longer than four weeks, monthly progress invoices will be submitted and become due on presentation. Overtime and weekend work will be charged at time and one-half.

STAFF BILLING LEVELS	RATE / HOUR
PROFESSIONAL	
Levels 17 – 19	\$233.00 - \$298.00
Levels 14 – 16	\$172.00 - \$201.00
Levels 11 – 13	\$136.00 - \$160.00
Levels 8 – 10	\$108.00 - \$127.00
Levels 5 – 7	\$84.00 - \$101.00
Levels 1 – 4	\$54.00 - \$77.00
<u>TECHNICAL</u>	
Two-Man Survey Crew	\$170.00
Levels 8 - 11	\$108.00 - \$136.00
Levels 4 – 7	\$77.00 - \$101.00
Levels 1 – 3	\$54.00 - \$69.00
OTHER DIRECT COSTS	
ATV Quad	\$100.00 / day
Safety Instrumentation	\$15.00 / hour
GPS Receivers (Resource Grade)	\$50.00 unit/ day
GPS Receivers (Geodetic Grade)	\$100.00 unit / day
Mileage (current IRS rate)	\$0495 / per mile
Supplies	Cost + 10%
Outside Services	Cost + 10%
Per Diem	Expenses