AM NO. 10-209 (C.9)

MEMO TO: City Council

FROM: John Marchione, Mayor

DATE: October 19, 2010

SUBJECT: **APPROVAL OF SUPPLEMENTAL CONSULTANT AGREEMENT NO. 1 FOR ENGINEERING SERVICES FOR THE CITY'S WATER SYSTEM PLAN UPDATE**

I. RECOMMENDED ACTION:

Approve the attached Supplemental Consultant Agreement No. 1 with HDR Engineering, Inc. in an amount not to exceed $80,000 including contingencies, and authorize the Mayor to sign the agreement.

II. DEPARTMENT CONTACT PERSONS:

Bill Campbell, Director of Public Works	425-556-2733
Ron Grant, Assistant Public Works Director/City Engineer	425-556-2742
Jeff Thompson, Project Engineer	425-556-2884

III. DESCRIPTION:

The City of Redmond is required by the Washington State Department of Health (DOH) to update its water system plan every six (6) years. Our last formal plan was completed in 2003 and approved by the DOH in March 2003. A new water system plan, in at least draft form, was planned to be submitted to DOH by March 2009. Setbacks associated with developing the water system demand forecast resulted in plan submittal delays and additional consultant costs.

The delays and additional consultant costs were attributed to the uncertainties and complexities of using the City's GIS system to develop water demands for each parcel in the City. These uncertainties and complexities resulted in the water system demand forecasting taking eighteen months longer than originally planned. This holdup resulted in further delays to complete and calibrate the hydraulic model and writing sections of the plan, along with increasing the project management costs.

A new water system plan is needed to address both growth-related issues in Redmond, along with existing system deficiencies. The water system plan includes water demand

projections based on projected land zoning, a water system model of the projected water demands, recommended system improvements and alternatives, cost estimates of anticipated improvements with potential funding sources, operation and maintenance programs, and compliance with the Washington State Department of Ecology and the Washington State Department of Health regulations.

IV. IMPACT:

A. Service Delivery: The preparation of the new water system plan will provide the Water/Wastewater Division of the Public Works Department the technical direction it needs to recommend policy alternatives to the Council. The policy decisions will be necessary in order to implement planned additions to the water system. These decisions will provide for growth in the system and provide improved services to those areas already developed.

B. Fiscal:

Estimated Project Costs	
Engineering Design Services:	
Original Contract	$470,000
Supplemental Consultant Agreement No. 1	80,000
Total	$550,000
Project Funding	
Water CIP	$550,000

The increased expenditures for the Water System Plan will be programmed from the Utility's operating funds.

V. ALTERNATIVE:

The City Council could choose to not to approve the consultant agreement; however, this action would result in not completing the Water System Plan.

VI. TIME CONSTRAINTS:

The plan should be submitted to the Washington State Department of Health as soon as possible.

VII. LIST OF ATTACHMENTS:

A. Supplemental Consultant Agreement No. 1

/s/ 10/6/2010
William J. Campbell, Director of Public Works Date

Approved for Council Agenda /s/ 10/8/2010
John Marchione, Mayor Date

ATTACHMENT A
City of Redmond Water System Plan Update
Project Nos. 1116.541040.321000 – City of Redmond Section
1122.541040.321000 – UPD Section

SUPPLEMENTAL AGREEMENT NO. 1

This SUPPLEMENTAL AGREEMENT, made and entered into this ____ day of _____, 2010, between the City of Redmond, Washington, hereinafter called the CITY, and HDR Engineering, Inc., hereinafter called the CONSULTANT, amends an earlier Agreement (AGREEMENT) dated January 28, 2008.

WHEREAS the CITY desires to supplement the original AGREEMENT;

NOW THEREFORE, it is mutually agreed that the terms, stipulations, and conditions of the original AGREEMENT shall be binding upon the parties hereto except insofar as amended by this SUPPLEMENTAL AGREEMENT as follows:

I

Section II, SCOPE OF WORK, is amended by the additional tasks summarized in Exhibit A-1 attached hereto.

II

Section IV, TIME FOR BEGINNING AND COMPLETION, is amended to change the completion date for all work to read December 31, 2011.

III

Section V, PAYMENT, shall be amended to compensate the CONSULTANT for the work described in Exhibit A-1.

A breakdown of the CONSULTANT'S cost proposal is attached hereto as Exhibit B-1. By this reference the exhibit is made a part of this SUPPLEMENTAL AGREEMENT.

Summarized below are the costs as listed in the original AGREEMENT and as modified by this SUPPLEMENTAL AGREEMENT.

Summary			
Description	**Original Agreement**	**Supplement No. 1**	**Total**
Labor Cost	$422,605	$72,020	$494,625
Reimbursables	$18,679	$2,380	$21,059
Total	$441,284	$74,400	$515,684
Contingency	$28,716	$5,600	$34,316
Grand Total	$470,000	$80,000	$550,000

EXECUTION

IN WITNESS WHEREOF, the parties have executed this SUPPLEMENTAL AGREEMENT by having their representatives affix their signatures below.

HDR Engineering, Inc.

By_____

_____
(Title)

CITY OF REDMOND

By _____
John Marchione, Mayor

Attested:

By_____
City Clerk

Approved as to Form:

By_____
City Attorney

EXHIBIT A

SUPPLEMENTAL AGREEMENT NO. 1
COMPREHENSIVE WATER SYSTEM PLAN UPDATE

Project Nos. 1116.541040.321000 – City of Redmond Section
1122.541040.321000 – UPD Section

Scope of Services

The following services are added to services provided for in the original agreement dated January 28, 2008 (as modified by Task Orders 1-5).

Task 4 – Demand Forecast

Objective:

Resolve complications encountered in using the City's parcel database for purposes of water demand forecasting, to permit the parcel-based forecast to be used in modeling of future conditions in the City's water distribution system.

Consultant Services:

1. Continue with modifications of parcel database and input data, in response to information and refinements provided by City staff.
2. Continue with review of database outputs including production of Excel spreadsheets and GIS maps displaying parcel data and associated water demands.
3. Continued communications with City staff aimed at finalizing the parcel-based forecast of water demands.
4. Transfer demand results to hydraulic modeling team to support analysis of water distribution system conditions and deficiencies.
5. Prepare and deliver final documentation of the parcel-based demand forecast, including spreadsheet, database, GIS files and a written summary of methods and results.

Assumptions:

1. These activities are in addition to services authorized previously in Task Orders 1-5.

Deliverables:

1. Final documentation of parcel-based water demand forecast, as described above.

City Responsibilities:

1. Support this task by reviewing forecast outputs and providing direction on refinements to the parcel database and calculations.

Task 7: Hydraulic Modeling Services

Objective:

Address unforeseen challenges associated with modeling the City's water distribution system; and assist with up to two interim fire-flow analyses for new development proposals, prior to delivery of the model for use by City staff.

Consultant Services:

1. Support the City in running fire-flow analyses for up to two proposed new developments; prior to delivery of the model for use by City staff.

2. Work through challenges involving model calibration and boundary conditions with adjacent water systems.

3. Support updated field hydrant tests for the Rose Hill model, since the City of Kirkland's SCADA data needed for model calibration is not available.

Deliverables:

1. Hydraulic model calibration results.
2. Brief emailed summary of results for up to two fire flow analyses.

Assumptions:

1. These activities are in addition to services authorized previously in Task Orders 1-5.

Task 14 – Project Management

Objective:

Extend monthly project management services to match the increased term of the project.

Consultant Services:

1. Continue providing project management services through June 2011. This includes staff oversight; regular meetings and communications with the City's project manager; and preparation of monthly invoices and progress reports.

Deliverables:

1. Regular communications with City project manager.
2. Monthly invoices and progress reports.

City Responsibilities:

1. Communicate any requirements to HDR in a clear and timely manner.

Project Contingency

Objective:

Provide funding, if needed, for additional fire flow analyses; and/or unanticipated review comments from the City and/or Washington State Department of Health regarding the draft water system plan. Services in this category will be provided only upon written authorization by the City's project manager.

Consultant Services:

1. Provide up to one additional fire-flow analysis for a new development.
2. Respond to unanticipated comments from the City and/or DOH, up to a limit of 25 hours of HDR labor.

Assumptions:

1. Up to one additional fire flow analysis for a new development may be requested after September 20, 2010.
2. Review comments on the plan will be limited to editorial or factual revisions to existing plan contents. No new topics will be requested requiring in-depth research and analysis.
3. Review comments will not require extensive modifications to the City's three hydraulic models of the water distribution system.

Deliverables:

1. Results of fire flow analysis, if requested.
2. Revisions to the Water Comprehensive Plan or brief, written explanations of existing plan content in response to unanticipated comments, as appropriate.

EXHIBIT B

SUPPLEMENTAL AGREEMENT NO. 1
COMPREHENSIVE WATER SYSTEM PLAN UPDATE

Project Nos. 1116.541040.321000 – City of Redmond Section
1122.541040.321000 – UPD Section

Estimated Costs

The following costs are estimated for services described in Exhibit A.

Billing Rates and Estimated Costs				
Project Role	Name	Estimated Hours	Billing Rate*	Estimated Labor Costs
Project Manager	Graham, Andrew	64	$181.83	$11,637
Water Resources Planner	O'Rourke, Kelly	15	$120.96	$1,814
QC - Hydraulic Model	Tomic, Sasa	26	$224.34	$5,833
Water Wastewater EIT	Doncov, Celina	170	$89.63	$15,238
Civil Engineer	Chen, Huaiqun	118	$103.21	$12,179
Hydraulic Modeling Lead	Olthof, Jeroen	46	$187.87	$8,642
QC - Capital Improvements	Hansen, Jeffrey	26	$135.92	$3,534
QC - Capital Improvements	Fitz, Allen	5	$184.97	$925
Admin Assistant	Wyemura, Allan	9	$73.19	$659
GIS Specialist	Miller, Michael	15	$140.29	$2,104
Project Assistant	Cody, Sandy	27	$66.07	$1,784
Financial Analyst	Pierce, Priscilla	25	$148.53	$3,713
QC - Financial Analysis	Koorn, Shawn W	2	$163.01	$326
Senior Project Controller	Buhlmann, Monica	19	$117.69	$2,236
QC - Water Comprehensive Plan	Igloria, Ronan	9	$155.09	$1,396
Total Hours and Labor Costs		576		$72,020
Estimated Expenses				$2,380
Total without Contingency				**$74,400**
Project Contingency				$5,600
Total Cost – Supplemental Agreement No. 1				**80,000**

*Rates are a weighted average of 2010 rates and projected 2011 rates (for tasks expected to extend into 2011).