CITY OF NEWBERG
CITY RECORDER INDEX NO. 1692

CITY OF NEWBERG
AGREEMENT WITH CH2M HILL, INC.
TO PROVIDE CONSULTING SERVICES
TO THE CITY OF NEWBERG

THIS CONTRACT is entered into this 17th day of SEPT., 1999 by and between the City of Newberg, a municipal corporation of the State of Oregon, hereinafter called **City**, and CH2M HILL, Inc., 825 NE Multnomah, Suite 1300, Portland, Oregon 97232, 235-5000, hereinafter called **Consultant**.

RECITAL

1. City has need for the services of a consultant with particular training, ability, knowledge, expertise and experience possessed by **Consultant**.

NOW, THEREFORE, in consideration of mutual promises, covenants and agreements of the parties, it is agreed as follows.

1. **Scope of Work:** The **Consultant** agrees to provide the services provided in the Scope of Work which is Exhibit "A" and attached hereto and incorporated by this reference. The **Consultant** represents and warrants to the **City** that the **Consultant** can perform the work outlined in the Scope of Work for the fee proposal amount.

2. **Compensation:** The **Consultant** agrees to perform the work for a not-to-exceed fee as indicated in their professional fee proposal obtained in the Scope of Work. The not-to-exceed figure is as follows:

$194,250.00

The **Consultant** shall not exceed the fee for any task included in the fee proposal amount. If the **Consultant** sees that the fee is going to exceed the not-to-exceed figure because the task has changed or is outside the scope, the **Consultant** shall notify the **City** in writing of the circumstances with an estimated amount that the fee is to be exceeded. The **Consultant** shall obtain written permission from the **City** before exceeding the maximum fee amount. If the **Consultant** does work that exceeds the maximum fee amount prior to obtaining the written permission, the **Consultant** waives any right to collect that fee amount.

3. **Additional Work Not Shown Within The Scope of Work:** If **City** requests or requires work to be done not within the Scope of Work of this project, the **Consultant** shall notify the **City** of such work, give an estimated fee amount, and obtain written instructions to proceed with work in the form of a contract amendment prior to proceeding with work and incurring any costs on behalf of the **City**. If **Consultant** proceeds with work prior to obtaining permission and/or contract amendment, the **Consultant** waives any right to collect fees for work performed.

4. **Status:** **Consultant** is not currently employed by the **City**. The parties to this contract intend that the relationship between them created by this contract is that of an employer-independent contractor. No agent, employee, or servant of **Consultant** shall be or shall be deemed to be the employee, agent or servant of **City**. **City** is interested only in the results obtained under this contract; the manner and means of conducting the work are under the sole control of **Consultant**, however, the work contemplated herein must meet the approval of the **City** and shall be subject to **City**'s general right of inspection and supervision to secure the satisfactory performance thereof.

5. **Work Performed:** The work to be performed by **Consultant** includes services generally performed by **Consultant** in his or her usual line of business.

6. **Taxes:** **Consultant** will be responsible for any federal or state taxes applicable to payments received under this contract. **City** will report the total of all payments to **Consultant**, including any expenses, in accordance with the Federal Internal Revenue Service and the State of Oregon Department of Revenue regulations.

7. **Benefits:** **Consultant** will not be eligible for any federal social security, state workers compensation, unemployment insurance, or public employees' retirement system benefits from the contract payment except as a self-employed individual.

8. **Federal Employment Status:** In the event any payment made pursuant to this contract is to be charged against federal funds, **Consultant** certifies that he or she is not currently employed by the federal government and the amount charged does not exceed his or her normal charge for the type of services provided.

9. **Hold Harmless**: **Consultant** shall defend, indemnify and hold harmless **City** from and against all liability or loss and against all claims or actions based upon or arising out of damage or injury to persons or property caused by or sustained in connection with the negligent acts, errors, and omissions of the **Consultant**.

10. **Insurance:**

a) **Consultant**, its subconsultants, if any, and all employers working under this agreement are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide workers' compensation coverage for all their subject workers; or by signing this contract, **Consultant** represents that he or she is a sole proprietor and is exempt from the laws requiring workers' compensation coverage.

b) **Consultant** will at all times carry a Comprehensive General Liability insurance policy for at least $1,000,000 combined single limits per occurrence for Bodily Injury, Property Damage, and Personal Injury. If the policy is written on the new occurrence form then the aggregate limit shall be $2,000,000. The City of Newberg, its agents, employees and officials all while acting within their official capacity as such, shall be named as an additional insured on the insurance specified in this paragraph.

c) **Consultant** will at all times carry a Professional Liability/Errors and Omission type policy with limits of at least $500,000. If this policy is a "claims made" type policy, the policy type and company shall be approved by the City Manager prior to commencement of any work under this contract.

d) **Consultant** shall furnish the **City** with Certificates of Insurance upon execution of contract. Such certificates of insurance evidencing any policies required by this contract shall be delivered to the **City** prior to the commencement of any work. A 30-day notice of cancellation clause shall be included in said certificate. The **City** has the right to reject any certificate for unacceptable coverage and/or companies.

11. **Indemnification:**

a) **Consultant** agrees to indemnify **City** for any claims, damages, losses, and costs, including, but not limited to, attorney's fees and litigation costs, arising out of claims by third parties for property damage or bodily injury, including death, to the proportionate extent caused by the negligence or willful misconduct of the **Consultant**, **Consultant's** employees, affiliated corporations, and subcontractors in connection with the Project.

b) **City** agrees to indemnify **Consultant** for any claims, damages, losses, and costs, including, but not limited to, attorney's fees and litigation costs, arising out of claims by third parties for property damage or bodily injury, including death, to the proportionate extent caused by the negligence or willful misconduct of the **City**, its employees or contractors in connection with the Project.

12. **Employees' Taxes: Consultant** shall also defend, indemnify and hold harmless **City** against all liability and loss in connection with and shall assume full responsibility for, payment of all federal, state and local taxes or contributions imposed or required under unemployment insurance, social security and income tax laws, with respect to **Consultant's** employees engaged in the performance of this contract.

13. **Termination:** This contract may be terminated by either party at the end of a project phase as defined in Exhibit "A" or at any time upon 30 days written notice.

14. **Contract Duration:** Except as provided for under paragraph 3, the duration of this contract shall be in accordance with Exhibit "A" or until project completion, whichever comes first. This fact not withstanding, the services of **Consultant** shall be authorized and paid on a phase-by-phase basis as described in Exhibit "A".

15. **Assignment:** The parties hereto each bind themselves, their partners, successors, assigns and legal representatives of such other party in respect to all terms of this Agreement. Neither party shall assign the contract as a whole without written consent of the other.

16. **Entire Agreement:** This Agreement constitutes the entire agreement between the parties and supersedes all prior agreements, written and oral, courses of dealing, or other understanding between the parties. No modification of this Agreement shall be binding unless in writing and signed by both parties.

17. **Additional Services:** If the project is materially

changed, or if **City** desires other professional services not already included in this Agreement or not customarily furnished as part of the agreed upon services, then additional consideration shall be paid to **Consultant** which shall be subject to negotiation by both parties, however, such services shall be furnished per the direct labor rate outlined in the professional fee proposal in the scope of work. Indirect labor costs and fixed fee shall be applied to the direct labor costs for these extra services in accordance with this agreement. The terms of this agreement shall apply to such additional services.

18. **Documents:** All original documents prepared by **Consultant** in performance of this Professional Services Agreement, including but not limited to original maps, plans, drawing and specifications are the property of **City** unless otherwise agreed in writing. Quality reproducible records copies shall be provided to **City** at **City**'s expense, upon request. Any reuse, change or alteration to original documents prepared by **Consultant** is not permitted without written verification or adaption by **Consultant**. **City** shall indemnify and hold harmless **Consultant** and **Consultant** independent professional associates or consultants from all claims, damages, losses and expenses including attorney's fees arising out of any unauthorized use of any instruments of professional service.

19. **Supplemental Terms:** Attached is an attachment which sets out supplemental terms and by this reference is incorporated as part of the agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first above mentioned.

CONSULTANT

By: Mitchell A Curtis

Name: Vice President

Title: Mitchell A Curtis

Date: September 17, 1999

CITY OF NEWBERG

By: Duane R. Cole

Name: Duane R. Cole

Title: City Manager

Date: September 8, 1999

Approved as to form:

Terrence D. Mahr, City Attorney

ATTACHMENT A

SUPPLEMENTAL TERMS TO THE CITY OF NEWBERG CONSULTING SERVICES AGREEMENT

1. Standard of Care

The standard of care applicable to Engineer's services will be the degree and skill and diligence normally employed by professional engineers or consultants performing the same or similiar services at the time the services are performed. Engineer will reperform any services not meeting this standard without additional compensation.

2. Terms of Payment

The Engineer will issue monthly invoices for work performed as detailed in Exhibit A, Scope of Work. Invoices are due and payable within 30 days of receipt.

3. Record Drawings

Record drawings, if required, will be prepared, in part, on the basis of information compiled and furnished by others, and may not always represent the exact location, type of various components, or exact manner in which the Project was finally constructed. Engineer is not responsible for any errors or omissions in the information from others that is incorporated into the record drawings.

4. City-Furnished Data

The City may provide to Engineer technical data in the City's possession relating to Engineer's services on the project. Engineer will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by the City.

5. Suspension, Delay, or Interruption of Work

The City may suspend, delay, or interrupt the services of Engineer for the convenience of the City. In such event, Engineer's contract price and schedule shall be equitably adjusted.

6. Subsurface Investigations

In soils, foundation, groundwater, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of inherent uncertainties in subsurface evaluations, changed or unanticipated underground conditions may occur that could effect total project cost and/or execution. These conditions and cost/execution effects are not the responsibility of Engineer.

EXHIBIT "A" - Nine pages

Revised Scope of Services

City of Newberg Groundwater Supply Investigation

Introduction

CH2M HILL's scope of service for the Newberg Groundwater Supply Investigation is presented below. The scope of services is based, in part, on the City's December 22, 1998, Request for Proposal (RFP), our proposal submitted to the City on January 22, 1999, and our revised proposal submitted on March 22, 1999. It has been modified to include several tasks associated with evaluating the feasibility of locating a Ranney Collector well in the wellfield area. The scope has been broken down into two elements; wellfield Expansion and Gearins Ferry Investigation. The wellfield expansion element has two phases. The first phase involves field data collection and analysis to provide the City with the information needed to make a decision to move forward with either a Ranney Collector or a conventional well (Well 7). The second phase involves project implementation once a decision is made. A cost estimate related to specific tasks for engineering services is attached. Our costs are on a time and materials basis, and will not exceed the budget presented in the attached table without the City's authorization. CH2M HILL's rate schedule is attached. In general, the scope of services for the project includes the following:

Wellfield Expansion

Phase 1 – Well 7 Siting and Ranney Collector Evaluation

- Drilling contractor selection following City procurement guidelines. Procurement will include selecting a driller for the Well 7/Ranney collector evaluation and will also include selecting a driller for exploration of the Gearins Ferry area (five boreholes, conversion of two boreholes to monitoring wells and completing a 1,500-gpm test well).
- Geophysical survey of the existing wellfield. The survey will cover much of the "Smith" parcel for the purpose of targeting possible locations for Well 7 and a Ranney Collector.
- Oversee test well and monitoring well construction, and conduct aquifer testing and ground water sampling.
- Evaluate potential collector yield and estimate reduction in wellfield yield caused by a collector.
- Present a recommendation to the City regarding moving forward with a collector well, Well 7 alone, or both.

Phase 2 – Project Implementation (assume Well 7 approach)

- Groundwater permit and land use applications support for Well 7.
- Prepare preliminary and final design for converting Well 7 to a production well.
- Prepare bid and contract document for Well 7 pumping system, piping, and wellhouse.

- Regulatory support.
- Construction oversight for converting Well 7 to a production well.

Gearins Ferry Investigation

- Land ownership and evaluation of project feasibility.
- Water rights survey.
- Preparing a technical memorandum summarizing project feasibility.
- Geophysical survey of the Gearins Ferry area.
- Five subsurface exploration boreholes and conversion of two boreholes to monitoring wells.
- Oversee test well construction, and conduct aquifer testing and groundwater sampling.
- Prepare a report summarizing the feasibility of developing the Gearins Ferry as a new wellfield for the City.

A detailed description of our scope of work is presented in the remainder of this document.

Wellfield Expansion

Phase 1 - Well 7 Siting and Ranney Collector Evaluation

Task 1 – Field Survey

Task 1A -Test Well Designs and Drilling Contractor Procurement

We will prepare design specifications for (1) a 1,000-gpm test well in the wellfield, (2) two observation wells in the wellfield, (3) 5 exploration boreholes in the Gearins Ferry area, (4) conversion of two of the exploration boreholes as monitoring wells in the Gearins Ferry area, and (5) a 1,500—gpm test well in the Gearins Ferry area. We will prepare specifications and bid documents for the drilling, well construction, monitoring well installations, and testing and assist the City in procuring a drilling contractor in accordance with the City's purchasing guidelines. We will advertise the project in the local paper (City to pay advertising fees) to request information on qualifications and experience. Using this information, we will request formal bids from the three most qualified drilling contractors. We will review the bids and make a recommendation for selecting a contractor on the basis of both qualifications and price. We assume that the City Manager and City Council must approve the contract, and we have assumed that the City will hold the drilling contract.

Task 1B—Geophysical Survey

CH2M HILL has teamed with Northwest Geophysical Associates, Inc. (NGA), to complete a time-domain electromagnetic (TDEM) survey of the wellfield to provide subsurface information for identifying the best location for Well 7 and/or a Ranney Collector. The objective of the survey will be to better define the extent of the high-yield gravels beneath the "Smith" property in the area previously mapped by CH2M HILL. Specifically, NGA

proposes to complete up to three profiles across the prospective target area with the TDEM soundings spaced at 20- to 40-meter intervals. This level of detail should be sufficient to accurately map subsurface conditions over most of the "Smith" property.

Task 1C—Test Well Construction and Aquifer Testing

On behalf of the City, we will provide services to manage and oversee the exploration boreholes, monitoring well installations in the boreholes, and the construction of the test well in the wellfield. The location of the borings and wells will be determined on the basis of the geophysical survey completed in the wellfield. In addition, we will provide oversight and will collect data during two aquifer performance tests: a step-drawdown test and a 72-hour constant rate pumping test. The objective of these tests is to estimate the potential yield of the test well and/or Collector well. We anticipate that the driller will install a temporary pump and perform the aquifer tests. CH2M HILL will be responsible for data collection, data analysis, and interpretation. We propose that transducers and data loggers be installed in Wells 3, 6, and possibly Well 4 to collect observation data during the aquifer performance tests.

Task 1D—Groundwater Quality

A groundwater sample will be collected during the aquifer test and will be submitted for laboratory analysis of Oregon Health Division (OHD) regulated and unregulated constituents, and the federal secondary maximum contaminant level constituents. In addition, the water sample will be tested for general water quality parameters to help evaluate compatibility of the water with the City's treatment plant requirements.

Task 2 – Data Analysis

Task 2A – Aquifer Test Analysis

We will analyze the aquifer test data to obtain estimates of aquifer properties and well yield. The degree to which pumping affects water levels and yield at the existing wells will be evaluated. These data will be used in subsequent aquifer analysis tasks.

Task 2B – Wellfield and Ranney Collector Performance Evaluation

The numerical groundwater flow model developed under a previous CH2M HILL contract with the City will be updated using the test data from Task 2A. Steady state model simulations will be conducted to:

- Estimate long-term Ranney Collector and Well 7 yield (individually and combined).
- Estimate yield reduction at existing City wells with a Ranney Collector and Well 7 (individually and combined) caused by well interference.
- Delineate the boundary of a wellhead protection area based on a 10-year time of travel with a Ranney Collector and Well 7 (individually and combined).

Task 3 – Technical Memorandum

Results from Tasks 1 and 2 will be summarized in a technical memorandum. On the basis of our technical analysis, we will provide a recommendation for moving forward with either: a) a Ranney Collector, b) a conventional well (Well 7), or c) both a Ranney Collector

and Well 7. Potential impacts on the water treatment plant will also be identified. Potential changes in scope and cost will be identified on the basis of the recommended alternative.

Phase 2 – Project Implementation (assume Well 7 alternative)

Task 4—Groundwater Permit Application

CH2M HILL will prepare the necessary application to transfer unused portions of its groundwater rights at Wells 1, 2, and 4 to Well 7. All required documentation and maps will be provided. We assume the City will pay application fees.

Task 5—Land Use Application

We understand that the City will submit a land-use compatibility application to Marion County for Well 7, which is a requirement of the groundwater permitting process. We will provide the City with technical support in this effort and will assist the City with submitting the necessary permit application forms. We will assist the City with addressing the Marion County Hearing Officers' concerns, which are presented in Section 2 (Approach) of the original proposal. Specifically, our assistance with the land-use application will include preparing a technical memorandum that supports the application with summaries of the following:

(1) Why the facility must be located on EFU-zoned land

(2) Demonstrate necessity by showing other reasonable alternatives have been considered and that facility must be located in an EFU zone by demonstrating the following:

- Technical and engineering feasibility (reference master plan)
- Why Wells 7 is locationally dependent; in other words, explain that because of the wellfield infrastructure, this well needs to be sited on EFU-zoned land.
- Why other nonresource lands are not viable water supply options for the City. The issue of exploration activities for the Gearins Ferry area also will be presented in that it is a possible viable option but that it will take years to develop.
- How existing right-of-ways have been established to access the well field and the proposed wells.
- Why the wells are necessary to protect public health and safety.
- Requirements of state and federal agencies (e.g., requirements to plan for a 20-year water supply).
- Water savings derived from the City's program to replace leaking pipelines and install water meters.
- Ongoing well rehabilitation program to improve well efficiencies and a summary of the amount of water realized from the improvements.
- The potential impacts on farmland due to expansion of the wellfield and explain long-term maintenance of the immediate farmland surrounding the wellheads.
- How construction of wellheads will be able to handle potential flooding.
- Long-term wellfield development plans and how those plans integrate with the City's water master plan.

3) Demonstrate why this is the most cost effective alternative.

4) Discuss how the land will be restored to its original condition after construction is completed.

Our scope includes our team's attendance at two meetings with the City to review permitting (land-use and water rights) issues related to Well 7 and it includes attending one meeting with the Marion County's hearing officer.

Task 6—Preliminary and Final Design

We will prepare final design specifications to convert the 1,000-gpm test well to a water supply well (Well 7). We anticipate providing the City with a preliminary (50-percent complete) design document for review and comment. Copies of the final design specifications will be submitted to the City for review. The design components will include specifications for the wellhead, pumping system, telemetry controls, piping, and pipeline connection to the City's main transmission line. A hydraulic piping analysis of the pipeline from the wellfield to the treatment plant will be performed to evaluate the adequacy of the existing pipeline to accommodate Wells 7. Necessary modifications to the pipeline will be presented in the final design specifications, if necessary. Design of the wellhead will take into account that Well 7 will be located within the 100-year floodplain. Previous design criteria presented in our February 10, 1998, memorandum to the City (City of Newberg Water Supply and Storage Options) will be used in the final design criteria for Well 7. In addition, we will prepare contract documents and assist the City in soliciting contractors to convert the test well to a water supply well. We also will assist the City with reviewing the proposals and will help them select a qualified contractor to convert the well to a water supply well. We will provide an engineer's opinion of the cost associated with converting the test well to a water supply well. We assume that the City will hold the contract with the selected contractor.

Task 7—Regulatory Review

Final design drawings for Well 7 will be reviewed with the City prior to being submitted to OHD for plan review. Conversion of the test well to a water supply well will be performed after the OHD has approved the final design.

Task 8—Construction Oversight and Final Record Drawing

CH2M HILL will provide construction oversight during conversion of the test well to water supply Well 7. In addition, we will provide final record drawing for the Well 7 as-built system. Our scope assumes that CH2M HILL will be onsite 1 day a week during construction activities, which are anticipated to take approximately 3 months. It is assumed that the City may provide more frequent construction monitoring. CH2M HILL will review pay estimates and the City will administer change orders.

Gearins Ferry Investigation

Task 1—Land Ownership and Project Perception

We will complete a detailed survey of the Gearins Ferry area that will identify landowners, zoning issues, and access concerns. This information will be used by the City in contacting landowners at and near the Gearins Ferry area. We assume the City will lead the effort in making contact with landowners. To assist the City in its public information process, we will prepare an informational flyer about the proposed Gearins Ferry area project. The flyer will be distributed to Newberg water users and other stakeholders in the Gearins Ferry area. The OHD, OWRD and Yamhill County also will be briefed about Gearins Ferry area project. Finally, we will assist the City, in presenting the proposed Gearins Ferry area project in a local town meeting. The purpose of the meeting will be to measure local support and/or opposition to the project. We anticipate that OWRD and Yamhill County will attend this meeting.

Task 2—Water Rights Survey

We will review current water rights in the Gearins Ferry area and will evaluate the viability of obtaining new water rights in this area considering the potential to interfere with senior water right holders.

Task 3—Technical Memorandum

Information gathered in Tasks 1 and 2 will be submitted to the City in a technical memorandum and details of the findings will be verbally presented to City officials. The overall purpose of the memorandum and presentation is to evaluate public as well as agency acceptance of the project. This memorandum will act as the basis for determining whether the Gearins Ferry project should be pursued further.

Task 4—Geophysical Survey

We will be teaming with NGA to complete a TDEM survey of the Gearins Ferry area. The objective of the survey will be to better define the extent of the possible high-yield gravel beneath the Gearins Ferry terrace. Data collected from the exploratory boreholes (Task 5) will be used to help interpret the geophysical data. Specifically, NGA proposes to complete five north-south TDEM profiles across the Gearins Ferry terrace with soundings spaced at 20- to 40-meter intervals. This level of detail, coupled with subsurface data collected during Task 5, should be sufficient to accurately map the extent of gravel deposits beneath the Gearins Ferry terrace.

Task 5—Subsurface Explorations

If the geophysical survey indicates that the gravel deposits are likely to be extensive, we will oversee the completion of five boreholes in the Gearins Ferry area. CH2M HILL will log the borings and will provide interpreted sections to NGA (Task 4). Information gained from drilling the boreholes will be used to map the subsurface and to help with interpretation of geophysical data. It is anticipated that this data, together with the geophysical data, will be used to define the nature and extent of high-yield gravels beneath the Gearins Ferry area. CH2M HILL will also oversee the conversion of two of the

exploration boreholes to piezometers, and will oversee the abandonment of the remaining boreholes in accordance with state regulations.

Task 6—Test Well Construction and Aquifer Testing

After selecting the drilling contractor, we will provide services to manage and oversee the drilling and construction of the test well in the Gearins Ferry area or the conversion of an existing well to a test well. In addition, we will provide construction oversight and will collect data during two aquifer performance tests: a step-drawdown test and a 72-hour constant rate pumping test. The objective of the tests is to estimate the potential yield of the aquifer. We anticipate that the driller will install a temporary pump to perform the aquifer tests. CH2M HILL will be responsible for data collection, data analysis, and interpretation. We anticipate that transducers and data loggers will be installed in the piezometers constructed during Task 5. Results and our findings of the aquifer tests will be provided to the City in a summary report (Task 9).

Task 7—Groundwater Quality

A groundwater sample will be collected during the aquifer test and will be submitted for laboratory analysis of OHD regulated and unregulated constituents, and the federal secondary maximum contaminant level constituents. In addition, the water sample will be tested for general water quality parameters to help evaluate the effect of the water source on the City water treatment plant.

Task 8—Reporting

We will prepare a groundwater supply feasibility report of the Gearins Ferry area. The purpose of the report will be to evaluate the feasibility of developing the Gearins Ferry area as a groundwater source for the City. Previous data collected by CH2M HILL for the City on the Gearins Ferry area also will be incorporated in the feasibility report. It is anticipated that the report will include the following main components: (1) identification of permitting and land use constraints, (2) a discussion of local support and/or opposition to the project, (3) a hydrogeologic model of the Gearins Ferry area, (4) estimates of the aquifer capacity and well yields, (5) identification of possible well locations, (6) a summary of water quality criteria, (7) a summary of treatment requirements, (8) preliminary design concept, and (9) a cost estimate and schedule for developing the Gearins Ferry area, if the project appears feasible.

TABLE 1

Estimated Project Costs

Task	Description	CH2M HILL		Outside Services		
		Labor	Expenses	NGA	Analytical	Drilling
Phase 1 Well 7 Siting and Ranney Collector Evaluation						
Task 1	Field Survey					
Task 1A	Test Well Design and Drilling Contractor Procurement	$15,000	—	—	—	—
Task 1B	Geophysical Survey	2,250	1,000	8,800	—	—
Task 1C	Test Well Construction and Aquifer Testing	6,900	2,000	—	—	Note 1
Task 1D	Groundwater Quality	550	500	—	1,820	—
Task 2	Data Analysis					
Task 2A	Aquifer Test Analysis	3,100	—	—	—	—
Task 2B	Wellfield and Ranney Collector Performance Evaluation	8,550	—	—	—	—
Task 3	Technical Memorandum	7,000	—	—	—	—
Phase 2 Project Implementation (assume Well 7 approach)						
Task 4	Groundwater Permit Application	3,000	—	—	—	—
Task 5	Land Use Application	16,500	—		—	—
Task 6	Preliminary and Final Design	35,400	—	—	—	—
Task 7	Regulatory Review	1,900	—	—	—	—
Task 8	Construction Oversight and Final Record Drawing	12,700	500	—	—	Note 1
	Subtotal	**112,850**	**4,000**	**8,800**	**1,820**	—
Gearins Ferry Investigation						
Task 1	Land Ownership and Project Perception	6,500	—	—	—	—
Task 2	Water Rights Survey	1,700	—	—	—	—
Task 3	Technical Memorandum	7,400	—	—	—	—
Task 4	Geophysical Survey	1,100	500	15,290	—	—
Task 5	Subsurface Explorations	5,500	500	—	—	Note 1
Task 6	Test well Construction and Aquifer Testing	6,100	1,000	—	—	Note 1
Task 7	Groundwater Quality	600	—	—	1,820	—
Task 8	Reporting	16,000	—	—	—	—
	Subtotal	**44,900**	**2,000**	**15,290**	**1,820**	—
	Totals	**157,750**	**6,000**	**24,090**	**3,640**	—
	10% Expense Markup			**2,410**	**360**	—
	Totals	**157,750**	**6,000**	**26,500**	**4,000**	—
	GRAND TOTAL					**$194,250**

NGA = Northwest Geophysical Associates, Inc.

1 = To be determined. Contract to be held by the City of Newberg.

CH2M HILL 1999 Rate Schedule

Role/Classification	Hourly Rate[a]
Project Manager/Senior Engineer (Jeff Barry, Bob Fuller)	**$117**
Project Hydrogeologist (Larry G. Eaton)	**$92**
Project Engineer, Planner (Kan Hwee, Andy Linehan)	**$92**
Staff Hydrogeologist/Engineer	**$70**
Technician	**$62**
Drafting/CADD	**$62**
Word Processing	**$55**
Office Support (Administrative Assistant)	**$55**
Expenses	
Mileage	**$0.42/mile, $26/day**
Direct Expense	**Cost**
Markup on Outside Services and Expenses	**10%**

[a] Except for the specific individuals shown, these are average hourly rates for staff that will be working on this project. Actual rates will vary based on specific personnel involved. Labor rate includes communication, computer charges, and health and safety. These rates will remain effective through December 31, 1999.

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1692

CITY OF NEWBERG
PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 4
July 11, 2001

Project: Groundwater Supply Investigation/Well #7
Consultant: CH2M HILL

Summary of Proposed Changes:

1. Work Involved:

This amendment includes the following main scope revisions detailed in "Attachment A," a letter from CH2M HILL to the CITY, dated April 18, 2001, entitled, "Engineering Contract Amendment-Well Field Project."

2. Cost Summary:

Original contract amount:	$194,250
Net change by previous amendments:	69,950
Previous total:	$264,200
This amendment:	13,500
Amended contract amount:	**$277,700**

3. Contract Time:

Contract time is extended by this amendment to December 31, 2001.

All other provisions of the professional services agreement remain in force.

ACCEPTANCE SIGNATURES:

Linda Macpherson, July 23, 2001
Consultant Date

Senior Policy Planner
Title

Duane R. Cole 7/26/2001
Duane R. Cole, City Manager Date

APPROVED AS TO FORM:

for
Terrence D. Mahr,
City Attorney

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-ATTACHMENT "A"-

CH2MHILL

April 18, 2001

Michael Soderquist, P.E.
Director
Community Development Department
City of Newberg
414 E. First Street
Newberg, Oregon 97132

Subject: Engineering Contract Amendment
Well Field Project

Dear Mr. Soderquist:

Because the Well Field Project has changed substantially, we offer this attached Amendment to the Engineering Contract for City signature. The amendment changes the predesign, final design, and the services during construction and adds some new scope for assisting the city with water rights transfers. In addition, per our Contract with the City for engineering services in conjunction with the wellfield activities, an allowance for annual labor increases is provided at the beginning of each year. The increase in labor costs for the year 2001 is reflected in the new budgets discussed below.

The changed scope of work that ocurred prior to the year 2001 related to the land use permitting efforts as we assisted the city in preparing the application for the permit and preparing for and participating in the land use hearings. Subsequent to the City's obtaining the permit, we prepared and submitted information to the Oregon Water Resources Department for requesting the issuance of the Ranney collector water right permit, which has now been obtained.

Once the water right permit was issued, we turned our attention on the project to develop the test well with the required pump and motor and appurtenances. A pipeline is also required. Because of the critical nature of the water resources this year, the well must be brought online as soon as possible. To accommodate this schedule, it was determined that the project should divided into several pieces with CH2M HILL preparing plans and necessary specifications for the entire project. The project has the following tasks:

1) Hydraulic analysis

2) Pipeline construction contract document

3) Pump Station design - Phase 1

4) Pump Station construction contract document - Phase 2

5) Material quantity take-off

CH2M HILL provided a hydraulic analysis and a material quantity take-off for the pipe, valves, and specified the design of the pump/motor for the City to use in purchasing. The City will complete the construction for the well pumping facility by obtaining three bid quotes for the pump and motor and three bids for the installation.

CH2M HILL will prepare the Pipe Contract Document and the Pump Station Phase 2 Contract Document. We will obtain bids for two phases of the project now instead of only one. We will provide construction services as required for each construction phase. We will provide record drawings of the completed work from information provided by the contractors, the City staff, and our own observation. The City is purchasing the pipeline materials for the contractor's installation.

These activities that are fully defined in the Amendment will replace the tasks of the original contract known as "Predesign and Final Design" and "Construction Oversight and Final Record". These original tasks were budgeted at a total of $48,600. The amended work is $58,500 for work to be conducted after March 1, 2001. Enclosed is a spreadsheet for the $58,500 of work to be completed.

The original contract is budgeted at $264,200 of which $214,569.84 has already been billed. There are $4,666.72 of unbilled charges from mid-year 2000 through February 2001 (not associated with the predesign and final design) that will be added to the billed-to-date amount for a new total of $219,236.56. I have attached two accounting status reports - one through February 2001 and one through April 6, 2001. Because of the changes needed in the contract, we request an adjustment in the budget of $13,500 [($219,236.56 + $58,500) - $264,200 = $13,536.65]. This makes the new contract amount $277,700.

Also a part of this letter is the new rate schedule that will be placed into effect for the work being performed in the year 2001. We appreciate your continued business and excellent working relationship, and look forward to continuing our service to the City.

Sincerely,
CH2M HILL

Robert L. Fuller, P.E.

Senior Consultant

CH2M HILL 2001 Rate Schedule

Role/Classification	Hourly Rate
Project Manager/Senior Engineer (Fuller/Phelps)	$150
Project Manager/Hydrogeologist (Long)	$95
Sr. Chemist	$115
Sr. Data Manager	$120
Staff Hydrogeologist/Engineer (Wirganowicz)	$85
Field Technician	$75
Data Assistant	$60
Drafting/CADD	$80
Administrative Assistant	$62
EXPENSES	
Mileage	$0.42/Mile, $26/day
Direct Expenses	At Cost
Markup on Expense	10%

Rates shown above are average hourly rates for staff that will be working on this project. Actual rates will vary based on specific personnel involved. Labor Rate includes standard communications, computer, and health/safety charges. These rates will remain in effect through December 31, 2001.

Amendment # 4

City of Newberg, Oregon
Well #7 Design and SDC Services
Scope of Work

CH2MHILL

Purpose and Background

This Amendment No. 4 is to be part of the Agreement dated September 8, 1999 between CH2M HILL, INC., (the "Engineer") and City of Newberg (the "Owner") for a project known as the Newberg WellField.

The purpose of this Amendment is to authorize CH2M HILL to proceed with the design of potable Well #7 and associated pipeline for additional supply from the City of Newberg Wellfield. The purpose of this scope is to define the work items and budget necessary to have an operational Well #7 by summer 2001. This amendment supercedes and replaces the tasks of the original contract known as Predesign and Final Design, and Construction Oversight and Final Record.

The tasks defined below identify only that portion of the work that is to be performed by CH2M HILL. In additional to these defined tasks, Owner staff will also have certain responsibilities to ensure an operational system occurs for the summer need.

General Assumptions

This project will provide the Owner with engineering analysis, design of the system, performance specifications and quantity takeoff's for owner to purchase certain and specific equipment. Engineer will prepare construction bid documents for the construction of about 650 feet of 20-inch pipeline (Owner furnished materials) in the well field. The Engineer will assist Owner with the Phase 1 – Temporary Pumping Facility, the installation of a temporary facility (fully coordinated by the Owner) for pumping during the summer of 2001. Upon completion of the temporary installation, Engineer will also create one set of contract documents for the Owner to retain a contractor to complete the construction of the final pump station, which will include a structural tower to place the motor control system upon. The Engineer will be responsible for Oregon Health Division approval.

To complete this work, the project is divided into 5 general categories of engineering services. Further, these tasks are separated into construction and Owner-furnished equipment tasks. The breakdown of tasks is shown below for this scope of services.

Task 1 - Design Services
- Task 1A – Hydraulic Analysis
- Task 1B – Pipeline Construction Document
- Task 1C – Pump Station Design – Phase 1
- Task 1D – Pump Station Contract Document – Phase 2
- Task 1E – Materials Pre-Purchase [Owner Furnished Equipment (OFE)]

Task 2 - Services During Bidding
- Task 2A – Construction Package
- Task 2B - Owner Furnished Equipment

Task 3 – Services During Construction
- Task 3A – Construction Packages
- Task 3B - Owner Furnished Equipment
- Task 3C – Temporary Installation Assistance

Task 4 - Post Construction Services

Task 5 – Water Rights Consulting

SCOPE OF SERVICES

Engineer agrees to furnish the Owner with the following services:

1.0 Design Services

1.A Hydraulic Analysis

Engineer will review, evaluate the existing pipeline system hydraulics, and determine new pipeline sizes for the addition of Well #7, and Wells #8, 9, 10, and 11 into the wellfield system. The results of this analysis will determine the pump station and pipeline system to be constructed.

1.B Pipeline Contract Document

Engineer will prepare one set of Pipeline Contract Documents suitable for public works bidding and construction of an OFE 20-inch ductile iron pipeline, including OFE pipe and appurtenances. Specifications will be based on APWA standards, and drawings will be plan view only and details. It is assumed that one drawing will be required. The sheet count will be:

Sheet 1 – Title Sheet & Plan View of Pipeline	Details will be provided on 8-1/2" x 11" Sheets

1.C Pump Station Contract Document – Phase 1

1.C.1 - Plans and Details

This element, consists of preparing a set of plans for the Owner to obtain price quotes from selected vendors to construct the Phase 1 pump station. It is assumed that no more than 3 sheets of drawings will be required. The sheet count will be:

Sheet 1 - Site Plan
Sheet 2 – Pump Station Sections/Plan
Sheet 4 - Miscellaneous Details

1.C.2 - Document Preparation

One set of 50% (11"x17") reductions of the drawings will be prepared for distribution to the project team.

1.C.3 - Management Reviews

This task consists of directing the activities of all CH2M HILL members of the project team, monitoring and controlling the schedule and budget for the project. This task also involves coordination and communicating the status of the project with Owners staff.

1.D Pump Station Contract Document – Phase 2

1.D.1 - Plans and Details

This element, together with the following subtask 1.D.2, consist of preparing detailed plans and specifications for obtaining building permits and communicating the design renovation of the pump station constructed under Phase 1 to be completed to its final state as Phase 2. This work includes the design of a steel tower system to elevate the motor control center above the high water elevation. It is assumed that no more than 5 sheets of drawings will be required. It is assumed that the Owner will coordinate the Instrumentation/Control system of the project, and therefore the Engineer will not be responsible for this part of the design. The sheet count will be:

Sheet 1 - Title Sheet
Sheet 2 - Site Plan
Sheet 3 – Structural Details of Stand
Sheet 4 - Miscellaneous Details
Sheet 5 – Miscellaneous Details

1.D.2 - Specifications

Written technical specifications will be prepared for Well #7 – Phase 2 construction. The prepared specifications will be sufficient for construction of the facilities, and will use the CSI master specification system or APWA Standard Specifications as determined during the final design. The written specification will also include CH2M HILL standard front ends, General Conditions, and Supplementary Conditions.

1.D.3 - Cost Estimates
An estimate of the cost to construct Phase 2 of the new pump station facilities will be prepared following completion of the design.

1.D.4 - Document Preparation
Ten sets of 50% reductions of the drawings, specifications, and amendments will be prepared for distribution to the project team.

1.D.5 - Management Reviews
This task consists of directing the activities of all CH2M HILL members of the project team, monitoring and controlling the schedule and budget for the project. This task also involves coordination and communicating the status of the project with Owners staff.

1.E Specification of Materials Pre-Purchase (OFE)

1.E.1 Pump Performance Specification for OFE
Engineer will provide Owner with performance requirements of new submersible pump for Well #7. Design of system shall be based on nominal future discharge of 1500 gpm at Well #7. The information will be forwarded to Owner in the form of an e-mail. Owner will be responsible for obtaining prices quotes, and coordinating delivery and payment of equipment.

1.E.2 Pipeline and Appurtenances for OFE
Engineer will provide Owner with performance requirements (size and quantity) of pipeline and pump station plumbing and piping equipment that are long lead time items for owner acquisition. Equipment sizing will be based on hydraulic analysis of system performed in Task 1.A. Engineer will forward to Owner in the form of a materials list the necessary items for pre-purchase. Owner will be responsible for obtaining prices quotes, and coordinating delivery and payment of equipment to project site.

Task 2 - SERVICES DURING BIDDING

Task 2.A - Construction Packages

It is anticipated the Owner will contract with three separate contractors for the construction of the work. The three contracts will be:

Pump Station Phase 1 Construction
Pipeline Construction
Pump Station Phase 2 Construction

The Engineer will respond to general questions from the prospective contractors, and be responsible for issuing addenda to the specifications as appropriate during the bidding period. The Engineer will also provide assistance to Owner in the evaluation of the contractor bids, and to provide Notice of Award to contractors.

Owner will be responsible for advertising the Phase 1-Pump Station Project, issuing the contracts to prospective bidders, and also for receiving and opening the bids. Engineer will be responsible for advertising the Pipeline and Phase 2-Pump Station Project, issuing the contracts to prospective bidders, and also for receiving and opening the bids for these two projects.

Task 2.B - Owner Furnished Equipment (OFE)

2.B.1 - Distribution of Purchase Orders

Engineer will assist the Owner as requested in supporting the purchase of OFE as requested. The budgeted man-hours to assist the Owner with bidding services associated with OFE is 8 man-hours.

Task 3 - SERVICES DURING CONSTRUCTION

Task 3.A - Construction Package

Note: Each of the following tasks apply to three separate construction packages or as noted otherwise in the task descriptions. One for the installation of a pipeline, a second for the final pump station-Phase 1 construction, and a third for Phase 2 of the pump station construction.

3.A.1 - Preconstruction Conference

Upon acceptance of the contractor's proposal, a preconstruction conference (one for the Pipeline contractor and one for the Phase 2 contractor) will be organized and held at Owner's office. The Engineer will prepare an agenda and coordinate arrangement for the meetings. The purpose of the meetings will be to review the specifications, obtain any certifications, bonds and insurance submittals from the Contractor, respond to the Contractor's questions, and assist the Owner in evaluating the schedule for construction.

3.A.2 - Site Visits

Engineer shall make visits to the site at intervals appropriate to the various stages of the construction as Engineer deems necessary to observe as an experienced and qualified design professional. Based on information obtained during such visits and on such observations, Engineer shall endeavor to determine, in general, if such work is proceeding in accordance with the contract documents and Engineer shall keep Owner informed of progress relative thereto. The purpose of Engineer's visits to the site will be to provide Owner with a greater degree of confidence that:

- The completed work of Contractor(s) will generally conform to the contract documents
- The intent of the contract documents has been implemented and preserved by Contractor(s).

During such visits, and on the basis of such observations, Engineer will immediately notify Owner if Engineer believes that Contractor's work will not produce a completed project that generally conforms to the contract documents or that will prejudice the integrity of the design concept of the project as reflected in the contract documents.

ENGINEER shall issue necessary interpretations and clarifications of the contract documents and in connection therewith, prepare revisions to design documents necessary for Owner work change directives and change orders as required and as approved by Owner.

It is not intended that the Engineer provide full time on-site observation of the construction. It is estimated that the construction project will be completed in 2 calendar months and that the Engineer's site visits will average 16 hours per week during that period. Ownerrecognizes that the periodic site visits do not provide the assurance that the contractor is conducting work to the specifications as relative to full time review of the construction .

3.A.3 - Submittal Reviews
Engineer will review and approve (or take other appropriate action in respect of) shop drawings and submittals, samples and other data which the Contractor is required to submit, but only for conformance with the design concept of the project and compliance with the information given in the contract documents. Such reviews and approvals or other action shall not extend to means, methods, techniques, sequences or procedures of construction or the safety precautions and programs incident thereto.

Engineer shall evaluate and determine the acceptability of substitute materials and equipment proposed by the Contractor(s).

3.A.4 - Monthly Pay Estimates
The Engineer will review, recommend modifications as appropriate, and submit to Owner , the Contractor's request for monthly payment requests. It is anticipated that each contractor will have two pay requests each.

3.A.5 - Questions during Construction
The Engineer will respond to questions from the Contractor regarding the intent of the plans and specifications.

3.A.6 - Change Orders
The Engineer will assist Owner in negotiating the scope and cost of any necessary contract change orders for this Pump Station replacement work. The Engineer will prepare such change orders as may be required and submit them to Owner for negotiation and approval.

3.A.7 - Punch List
When the Contractor approaches completion, the Engineer and Owner will inspect the constructed facility for any major remaining items that the Contractor must complete. The notes of the Engineer and Owner will be consolidated and sent to the Contractor as a punch list to complete the facility.

3.A.8 - Final Inspection
Upon completion of construction, the Engineer will participate in one final inspection with representatives of Owner and the Contractor. Based on this inspection the Engineer will prepare a final list of remaining work items for Owner to issue to the Contractor.

3.A.9 - Recommendation for Acceptance
Upon completion of punch list items by the Contractor, the Engineer will submit to Owner a recommendation of acceptance of the construction.

Task 3.B - Owner Furnished Equipment Package
3.B.1 - OFE Submittal Reviews
Engineer will, when requested by the Owner, review and approve (or take other appropriate action in respect of) shop drawings and submittals, samples and other data which Manufacturers/Vendors are required to submit, but only for conformance with the design concept of the project and compliance with the information given in the contract documents. Such reviews and approvals or other action shall not extend to means, methods, techniques, sequences or procedures of manufacture or the safety precautions and programs incident thereto.

Engineer shall evaluate and determine the acceptability of substitute materials and equipment proposed by the Manufacturers/Vendors.

3.B.2 - Questions during Manufacture
The Engineer will respond to questions from the Owner concerning Manufacturers'/Vendors' questions regarding the intent of the products to be purchased.

3.B.3 - Inspections
Upon receipt of OFE and at the Owner's request, the Engineer will participate in an inspection with representatives of Owner and the Manufacturers/Vendors. Based on this inspection the Engineer will prepare a list of outstanding materials, if any, for Owner to issue to the Manufacturers/Vendors.

3.C Temporary Installation Assistance
As requested by the Owner , Engineer will provide on-site assistance with the installation of the temporary pumping system. Although Owner will be responsible for installation and coordination of electrical, and installation of pumping equipment purchased by Owner for project.

Task 4 - POST CONSTRUCTION SERVICES

4.1 - Record Drawings
The original design drawings will be revised to reflect approved changes in the construction as documented by the Contractor. One reproducible set of the resulting record drawings will be provided to Owner .

4.2 - Operations and Maintenance
All of the equipment submittals, including manufacturer's written O&M recommendations, will be assembled into a 3-ring binder. Photographs of the project construction will also be included.

4.3 - Start-up Assistance
When the Contractor indicates that the facility is fully functional in accordance with the construction specifications, the Engineer will devote up to 2 man-days assisting Owner staff in starting up, testing the pump and debugging the operation.

Task 5 – WATER RIGHTS CONSULTING

5.1 – Limited License
Engineer will assist Owner with development and application for a limited license use of water from Well #7 for the 2001 water year if required. Owner will be responsible for all application fees to be paid.

5.2 - Water Rights Transfer Application
Engineer will assist owner with application for transfer of existing water rights to Well #7. This work will be performed by a Certified Water Rights Examiner, and will include the required mapping activities required by the Oregon Water Resources Department. Owner will be responsible for all application fees to be paid.

SCHEDULE

The anticipated schedule is to complete the Pipeline, and Phase 1-Pump Station design activities by the end of April, 2001. Phase 2-Pump Station Design will be completed during the late summer of 2001.

COMPENSATION

Compensation will be made to the Engineer for services performed at the agreed per diem rates as defined in the Agreement. Expenses pertaining to this project will be paid in accordance with the existing AGREEMENT. A budget of $58,500 (This amount replaces the previous budget of $48,600.00 for predesign, final design, and services during construction.) is estimated for the work included in the scope of work identified in this Amendment 5. Based on the total contract amount of $264,200 and the amount spent through February 2001 on this contract – $219,236.56, this amendment authorizes an additional $13,500. The new contract amount is then $277,700.

City of Newberg
March 01, 2001
thru
April 06, 2001

Tasks		Budget	Budget Adjustments	Previously Invoiced	Current Invoice	Total Invoiced	Budget Remaining
Phase 1: Well 7 and Ranney Collector Evaluation							
W7.1A Test Well Design and Drilling Contr.	Completed	$15,000.00	($11.36)	$14,988.64	$0.00	$14,988.64	$0.00
W7.1B Geophysical Survey	Completed	$12,920.00	($304.85)	$12,615.15	$0.00	$12,615.15	($0.00)
W7.1C Test Well Construction/Aquifer Test	Completed	$78,860.00	($15.05)	$78,844.95	$0.00	$78,844.95	$0.00
W7.1D Groundwater Quality	Completed	$2,870.00	($21.50)	$2,848.50	$0.00	$2,848.50	$0.00
W7.2A Aquifer Test Analysis	Completed	$3,100.00	($4.80)	$3,095.20	$0.00	$3,095.20	$0.00
W7.2B Well Field and Ranney Collector	Completed	$8,550.00	$152.95	$8,702.95	$0.00	$8,702.95	($0.00)
W7.03 Technical Memorandum	Completed	$7,000.00	$674.55	$7,674.55	$0.00	$7,674.55	$0.00
Phase 2: Project Implementation							
W7.04 Groundwater Permit Application	Uncertain	$3,000.00	($2,288.00)	$712.00	$0.00	$712.00	$0.00
W7.05 Land Use Application	Uncertain	$16,500.00	$2,818.12	$19,318.12	$0.00	$19,318.12	$0.00
W7.06 Preliminary and Final Design	Not Complete	$35,400.00	($1,000.06)	$4,758.88	$15,106.82	$19,865.70	$14,534.24
W7.07 Regulatory Review	Not Complete	$1,900.00	$0.00	$611.00	$68.20	$679.20	$1,220.80
W7.08 Construction Oversight and Final Record	Not Complete	$13,200.00	$0.00	$401.50	$93.00	$494.50	$12,705.50
W7 Total		**$198,300.00**	**$0.00**	**$154,571.44**	**$15,268.02**	**$169,839.46**	**$28,460.54**
Gearins Ferry Investigation							
GF.01 Land Ownership and Project Perception	Completed	$6,550.00	($13.10)	$6,198.60	$0.00	$6,198.60	$338.30
GF.02 Water Rights Survey	Completed	$1,730.00	$13.10	$1,743.10	$0.00	$1,743.10	$0.00
GF Total		**$8,280.00**	**$0.00**	**$7,941.70**	**$0.00**	**$7,941.70**	**$338.30**
Supplemental Tasks							
ST.1A Water Demands	Completed	$2,500.00	($1,155.00)	$1,345.00	$0.00	$1,345.00	$0.00
ST.1B Source Options	Uncertain	$7,000.00	$11,913.00	$30,281.38	$0.00	$30,281.38	($11,368.38)
ST.1C Reporting	Not Completed	$12,600.00	$0.00	$1,279.04	$0.00	$1,279.04	$11,320.96
ST.2A Model Update	Completed	$7,500.00	$201.00	$7,701.00	$0.00	$7,701.00	$0.00
ST.2B WHP Support	Completed	$4,000.00	$1,513.00	$5,689.00	$0.00	$5,689.00	($176.00)
ST.3A Well No.4 Evaluation	Completed	$3,000.00	$6,928.00	$10,428.00	$0.00	$10,428.00	($500.00)
ST Total		**$36,600.00**	**$19,400.00**	**$56,723.42**	**$0.00**	**$56,723.42**	**($723.42)**
CT.ZZ Contingency		$21,020.00	($19,400.00)	$0.00	$0.00	$0.00	$1,620.00
Grand Total		**$264,200.00**	**$0.00**	**$219,236.56**	**$15,268.02**	**$234,504.58**	**$29,695.42**