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AMENDMENT NO. 2
Contract Between Douglas County
and
R.O. Anderson Engineering, Inc.
Foothill Sewer Project

BARBARA RILEY
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[Signature]
DEPUTY

Whereas, on October 20, 1998, Douglas County, a political subdivision of the State of Nevada, and R.O. Anderson Engineering, Inc., an independent contractor, entered into a contract for Contractor to provide engineering services to provide a sewer master plan update, geotechnical investigation, design surveying, hydraulic modeling, engineering design, and easement documents for the Foothill Sewer Project; and

Whereas on November 4, 1999, the Board of County Commissioners and Douglas County Redevelopment Agency approved Amendment No. 1 to provide additional engineering services and design efforts to evaluate an alternate north alignment for the sewer collection system, and coordinate GTE facilities; and

Whereas, the Contractor was required to provide additional engineering services and design efforts for the Foothill Sewer Project to modify the sewer alignment through the Town of Genoa across properties owned by the Giovacchini family; and

Whereas, the Contractor was required to provide additional engineering services and design efforts to incorporate 24 additional sewer service laterals through the Town of Genoa; and

Whereas, the Contractor was required to provide additional services and design efforts for sewer main extensions up Nixon Street and along Jacks Valley Road north of Genoa Lane; and

Whereas, the Contractor was required to update the sewer master plan to evaluate impacts from potential zoning changes; and

Whereas, the County desires the Contractor to provide additional services and design efforts to evaluate a sewer alignment along Genoa Lane, US Highway 395, Airport Road, and Heybourne Road; and

Whereas, the Contractor desires to incorporate a new fee schedule for new work included in this amendment; and

Whereas, the Contractor was not required to complete a wetland delineation, certain geotechnical services were not required, and mechanical engineering subconsultant was not required

Now, therefore, in consideration of the agreements herein made, the parties mutually agree as follows:

- The Contractor shall perform the work described in Exhibit A, Tasks 8 through 13, to evaluate and design the alternate Genoa Lane alignment of the proposed sewer collection system.

- The Contractor shall perform the work described in Exhibit A according to the schedule shown in Exhibit B
- Contractor agrees to provide the services set forth in Exhibit A of this amendment, and a credit for the wetland delineation, certain geotechnical services, and mechanical engineering subconsultant that were not required at a cost not to exceed a total cost of \$168,557.50, as outlined in Exhibit C.
- Total compensation for the original contract and this amendment shall not exceed a total cost of \$521,490.50, and is summarized as follows:

1. Original Contract Amount	\$287,240.00
2. Amendment No. 1	\$ 65,693.00
3. Amendment No. 2	<u>\$168,557.50</u>
Not To Exceed Contract Amount	\$521,490.50

- All other sections of the original agreement and Amendment No. 1 remain in effect.

Robert O. Anderson, President
R.O. Anderson Engineering, Inc.

7-30-00

Date

Jacques L. Strehgler
Board of County Commissioners and
Douglas County Redevelopment Agency

8/3/00

Date

Attest
Barbara Reed
County Clerk *By: [Signature], deputy*

8-5-00

Date

Robert J. Mann
District Attorney

8/8/00

Date

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Exhibit A
Amendment No. 2

1

Exhibit A
Scope of Work

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Amendment No. 2 – Exhibit A

Changes to work authorized in the original contract or Amendment No. 1 are summarized below:

Task 2A – Design Investigations

Geotechnical services were completed under the original budget amount. The cost for this task was reduced as shown in the compensation schedule of this amendment.

Task 4A – Permit Applications

The original contract included work to prepare a wetland delineation for the project alignment. The U.S. Department of Agriculture, Natural Resource Conservation District, completed the wetland delineation. The Contractor was not required to complete the wetland delineation. However, the Contractor did assist by coordinating with the Natural Resource Conservation District, conducting site visits, and preparing mapping of findings. Since the Contractor was not required to conduct the wetland delineation, the cost for Task 2A was reduced as shown in the compensation schedule of this amendment.

Task 4B – Final Design Documents

Services from a mechanical engineering subconsultant were not required as originally anticipated. The Contractor was required to provide additional work as discussed below, and the cost for this task was increased as shown in the compensation schedule of this amendment:

- Modify pipeline alignment through the Town of Genoa, re-routing it through properties owned by the Giovacchini family. These additional services include route surveying, preparation of easement documents, attending various meetings, making site visits, and changing pipe from force main to gravity sewer.
- Additional services in and around the Town of Genoa including the evaluation and design of incorporating 24 additional individual sewer laterals to the project. Additional services included providing topographic survey to insure adequate depth over sewer laterals, adding the sewer laterals to the drawings, delineating the proposed laterals as bid alternatives, and investigating existing underground utilities in affected areas.
- Adding additional sewer stubs for future main extensions within selected areas of the Town of Genoa. Design services required to complete this subtask have included adding three additional mains across Foothill Road and one additional main across Genoa Lane. By necessity these services have included investigation of the location of existing underground utilities, delineating these main extensions as bid alternatives and reviewing surrounding elevations to confirm extent of service.

- Adding the proposed main extensions up Nixon Street in the Town of Genoa. Additional design services required to complete this work include additional topographic survey of the area, researching the status of rights-of-way and the location of underground utilities in the area.
- Adding the proposed main extension north along Jacks Valley Road towards the fire station. This required obtaining additional topography along Jacks Valley Road, right-of-way and utility research.
- Evaluation of potential zoning changes which required additional work to determine flows, evaluate pipe sizes, and amend the master plan document.

The Contractor will complete 100% construction drawings and construction contract specifications for the north alignment from US Highway 395 to the North Valley Waste Water Treatment Plant.

**FOOTHILL SEWER PROJECT
EVALUATION OF ALTERNATE ALIGNMENT No. 2**

**Scope of Services
July 24, 2000**

Douglas County, as Owner, desires to evaluate a second alternate alignment of the proposed sewer collection system as included in the *Foothill Sewer Project Genoa Area Sewer Collection Master Plan, dated March 29, 1999, and updated January 24, 2000*. This alternate alignment contemplates routing the flows generated within the project areas from the Town of Genoa easterly along the alignment of Genoa Lane to U.S. Highway 395; north along U.S. Highway 395 to Airport Road and easterly along Airport Road to Heybourne Road, then northerly along Heybourne Road. In total this alignment is approximately 46,100 feet in length and, if implemented, would replace that portion of the previous alignment that extended through property owned by, Little Mondeaux Limousin Corp., Bureau of Indian Affairs, Indian Hills General Improvement District, U.S. Forest Service and Bently Agridynamics, respectively.

The following paragraphs provide a detailed scope of services for the Contractor to evaluate the technical feasibility of the proposed alignment and design the needed improvements. The Contractor will also identify specific issues, both administrative and physical, that must be addressed and provide final recommendations for implementing the proposed improvements.

Task 8 – Sewer Master Plan/Facilities Plan Update (10% Design Report)

This task entails updating the sewer master plan and facilities plan for the Genoa area. The Contractor shall coordinate the submittal of the final draft design report to Nevada Division of Environmental Protection (NDEP) for their review and approval. As part of this plan, the following shall be evaluated:

Key elements of the alternative evaluation include:

- Using the projected sewage flow rates and volumes calculated within the existing master plan document, including initial, 5-, 10-, 15- and 20-year average daily and peak design flows for each of the four sub-planning areas, prepare a description of phased improvements, including approximate line sizing, pump sizing, wet well sizing, and emergency storage provisions.
- Identification of probable line locations and lift station locations,
- Preliminary hydraulic calculations for the proposed improvements including preliminary pipeline sizes, estimation of flow depths within gravity pipelines under average and peak hour conditions, and estimation of velocities and head losses through existing and proposed force mains. Additionally, for each lift station within

the proposed collection system, the Contractor will provide estimates of the pump head and flow requirements, horsepower requirements, estimate annual power consumption/costs, and estimate potential regulation storage that may be required at each lift station site.

- A planning level estimate of costs for construction and purchase of easements and an estimated cost of Operations and Maintenance, including twenty-year projections for life cycle equipment replacement and energy costs.
- A cost comparison of former alignments and this alternative alignment.

The County shall promptly review and provide technical comments to the Contractor. The Contractor shall promptly respond to County comments on the report.

Key deliverables include:

- Ten copies of the final draft report, to include an executive summary.
- Ten copies of each full-size ("D" size) map(s) showing sewer service areas and alternative sewer line and lift station locations.
- Ten bound copies of the final report, to include an executive summary, one unbound reproducible original, and electronic files (Word, Excel, and AutoCAD)

Task 9 – Design Investigations

County staff will review the updated sewer master plan/facilities plan and determine whether the alternate alignment justifies additional study. Upon written authorization to proceed, the Contractor will conduct additional investigations including:

Geotechnical Investigation:

- A geotechnical investigation including field exploration, laboratory testing and engineering analysis to adequately reveal subsurface soil and ground water conditions along the selected alignment, including those areas recommended for boring under the Carson River and Highway 395.
- An earthquake risk study showing all active and non-active seismic faults within the alternative alignment area, and a description of probable risk and possible mitigation.
- Evaluation of soil corrosivity and recommendations.
- Bedding and backfill requirements and recommendations.
- Analysis of trench stability.

Exploration efforts along the preferred alignment will be performed by excavating a combination of drilling test holes and backhoe test pits. Exploration will be performed on approximate 1,000-foot centers to depths below proposed invert elevations. Test pits will be utilized in undeveloped areas, whereas test borings will be advanced in areas of tight utility clearance, as well as any proposed crossing(s) beneath the Carson River and US Highway 395. Results of explorations will be logged in the field by geotechnical personal. Depth to groundwater will be measured where encountered and representative soil samples will be returned to the laboratory for further analysis.

Representative samples of each significant soil type will be tested in the laboratory to characterize the foundation soils' index properties, such as moisture content, grain size distribution and plasticity.

Results of the geotechnical research, site exploration, laboratory testing and engineering analysis will be summarized in the geotechnical report.

The Contractor is responsible for obtaining permission for alignment and facility locations. Where repeated access is needed the Contractor shall provide advanced notification as a courtesy to the land owner(s). As needed, the County will assist the Contractor with legal issues pertaining to property access, or validate the need for access if requested or required by a property owner.

The County will promptly review the draft report and provide the Contractor with any technical comments. The County will also provide the Contractor with a specific characterization of its risk tolerance for seismic events, which the Contractor can use to evaluate and provide technical recommendations for minimization of adverse impacts due to such events. The Contractor shall respond to County comments on the geotechnical report and technical memorandum.

Key deliverables are to include:

- Ten copies of the above report.
- Ten copies of a technical memorandum with conclusions and recommendations from the investigations on final alignment and location of facilities, and recommendations on corrosion potential, trench bedding and backfill, lift station structural fill, mitigation of earthquake risk, concrete, and borings or directional drilling.

Design Surveying:

This task will include establishment of control points, benchmarks, and perform all ground and aerial surveying necessary to complete the preliminary design, hydraulic modeling, and final design of the sewer line and lift stations. Mapping will comply with National Map Accuracy Standards for 1" = 40' scale and one-foot contour interval mapping including spot elevations.

Key deliverables are to include:

- One set of black and white contact prints.
- One draft set of large-scale "D" size review prints.
- AutoCAD v. 14 files of final topographical mapping with assigned vertical elevations.
- Two copies of a large-scale "D" size prints of the topography and ground features along the sewer alignment.

- Location (coordinates) and elevation of all ground control points and benchmarks.

Task 10 – Preliminary Design Engineering (50% Design Effort)

This task entails completing the preliminary design effort for the preferred sewer alignment and lift stations, for the initial, 5-, 10-, 15- and 20-year average and peak design flows. This task also details the phasing of improvements for each of the above respective flow conditions, including possible parallel sewer lines, modularly designed lift stations, exchangeable pump assemblies, etc.. The Contractor shall also evaluate the capabilities of the existing force main and lift station facilities located within and outside the Genoa Lakes development, and shall make recommendations as to the short, medium and long-term viability of these facilities. And, if necessary, the Contractor shall recommend improvements to these facilities so they function properly for each phase of the ultimate proposed system.

The Contractor shall develop and submit with the 50% design drawings results of a hydraulic computer model of the selected alignment using HYDRA software package. The hydraulic model will provide estimated design flow conditions at each junction point (manhole) and at each lift station, pipeline capacities including estimated hydraulic gradeline(s) through the system and total head and horsepower calculations for all pump stations for the initial, 5-, 10-, 15-, and 20-year average and peak design flows.

Key deliverables are to include:

- Ten copies of a technical memoranda and conceptual construction drawings detailing the phased improvements for the initial, 5, 10, 15 and 20-year average and peak design flows and recommended modifications to the existing facilities to ensure they function adequately for each phase of the proposed system. The submittal shall also include emergency storage provisions.
- Five copies of 50% design drawings and specifications, and engineer's opinion of probable cost.
- Two copies of a technical appendix detailing the final output and calibration efforts of the hydraulic computer model. The appendix shall include a narrative discussion of the assumptions, inputs, results, and limitations of the hydraulic model as well as the following:
 - a. Predicted design average and design peak hourly flows at junction points including lift stations.
 - b. Peaking Factors.
 - c. Cumulative design average flow and design peak hourly flow at junction points.
 - d. Pipe capacities and depths of flow for design average flow and design peak hourly flow for the 5, 10, 15, and 20-year flows.
 - e. Total head and horsepower calculations for all pump stations.
 - f. Head-capacity curves for all pump stations which show all conditions of head and capacity under which the pumps will be required to operate. The system

curves shall reflect the extreme maximum and minimum frictional losses due to potential changes in pipeline friction values expected during the lifetime of the system as well as the high and low wet-well levels. Pursuant to Ten State Standards, friction values will be evaluated at C=120 and they will also be calculated using the proposed pipe manufacturer's recommended value for new pipe installations.

- One computer disk copy of the hydraulic model.

The Contractor will provide a final recommendation for alignment and facility locations. The Contractor shall respond to County comments on the technical memorandum, hydraulic model, and 50% construction drawings. County staff will review recommendation and the above studies and reports, and the County will select the final alignment and locations for the sewer line and lift stations.

Key deliverables are to include:

- Ten copies of a technical memorandum from the Contractor defining and explaining the recommended alignment based upon those conditions outline in the above mentioned studies and reports.

Task 11 – Permit Applications

The Contractor shall prepare the various permit application packages for submittal to all required local, state and federal agencies for their review and approval, including but not limited to the:

- a. Douglas County Design Review Application
- b. Douglas County Building Permits
- c. Douglas County Site Improvement Permit
- d. Nevada Division of Environmental Protection
- e. Nevada Division of State Lands
- f. Nevada Department of Transportation
- g. U.S. Army Corps of Engineers

Delineation of areas considered potential wetlands or Waters of the United States are beyond this scope of services. Similarly, cultural resource investigation(s) of any portion of the proposed alignment(s), if required, are also beyond this scope of services.

Douglas County will pay all permit fees. Contractor will respond to all agency inquiries and requests for additional information to support permit applications within fifteen (15) days of receipt of inquiry.

Task 12 – Final Design Documents

This task entails completing the final design drawings and construction contract specifications for all work including civil, electrical and control system improvements. Telemetry shall be designed and incorporated into the County's existing system. Included with this shall be survey maps and legal descriptions of all needed right-of-way and easements for construction of the sewer line and lift stations. The Contractor's final design and hydraulic model shall include the extension of the proposed force main north along the alignment of Heybourne Road to a point that the existing gravity interceptor has sufficient capacity for existing system flows with projected flows from the Genoa area.

The Contractor shall update the hydraulic model to reflect changes that are made from model completed at the 50% design level, Task 10.

The Contractor shall prepare and submit final drawings and specifications to state and federal agencies for their final review and approval.

The Engineer's Joint Contract Documents Committee (EJCDC) standard contract documents (1997 version) shall be used and modified as necessary.

Contract documents will include advertisement for bids, instruction to bidders, bid form agreement, general conditions, supplementary conditions and technical specifications and drawings. Technical specifications shall include a section on how bid items will be measured and paid for. The Contractor will prepare technical specifications for all aspects of the improvements. The County will promptly review the 90% level improvement plans and specifications together with the hydraulic model and provide Contractor with specific technical comments. The Contractor shall respond to County comments on the hydraulic model, technical memorandum, design drawings and specifications.

Key deliverables are to include:

- Ten copies of the 90% completed construction drawings and construction contract specifications for county review and approval. Two copies of the 100% completed construction drawings and construction contract specifications and reproducible mylar of the final construction drawings.
- Two copies of the completed surveys and legal descriptions and reproducible mylar of the final survey documents.
- One copy of the application package submitted to each state and federal agency for review and approval.
- Five copies of the final technical memoranda and technical appendix.
- One copy of a technical appendix detailing the final output and calibration efforts of the final hydraulic computer model. The appendix shall include a narrative discussion of the assumptions, inputs, results, limitations of the hydraulic model and the changes necessitated from the 50% submittal including the following documentation:

- a. Predicted design average and design peak hourly flows at junction points including lift stations.
 - b. Peaking Factors.
 - c. Cumulative design average flow and design peak hourly flow at junction points.
 - d. Pipe capacities and depths of flow for design average flow and design peak hourly flow for the 5, 10, 15, and 20-year flows.
 - e. Total head and horsepower calculations for all pump stations.
 - f. Head-capacity curves for all pump stations which show all conditions of head and capacity under which the pumps will be required to operate. The system curves shall reflect the extreme maximum and minimum frictional losses due to potential changes in pipeline friction values expected during the lifetime of the pumping units as well as the high and low wet-well levels. Pursuant to Ten State Standards, friction values will be evaluated at $C=120$ and they will also be calculated using the proposed pipe manufacturer's recommended value for new pipe installations.
- One computer disk copy of the final hydraulic model.
 - Engineer's Opinion of Probable Cost based on Project's Bid Schedule.
 - One computer disk with drawing AutoCAD files and contract document text files (Word format).

Task 13 – Right-of-Way and Easement Documents

The Contractor will prepare three legal descriptions to support the purchase of right-of-way and easements across private property. Easements are anticipated at or near the intersection of U.S. Highway 395 and Genoa Lane, and two additional easements in or around the Town of Genoa.

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**Amendment No. 2 – Exhibit B
Revised Project Schedule**

The contract times and completion dates for project milestones are set forth in the following schedule.

Item	Completion Date
1. Submit Task 8 final draft report for Sewer Master Plan/Facilities Update(10% Design Report)	July 26, 2000
2. County provides technical comments to Contractor on Sewer Master Plan/Facilities Update(10% Design Report)	August 4, 2000
3. Submit Task 8 final report for Sewer Master Plan/Facilities Update	August 11, 2000
4. County authorizes Amendment No. 2 in its entirety.	August 11, 2000
5. Submit Task 9 – Design Investigations (Geotechnical Investigation Report and Technical Memorandum)	September 8, 2000
6. County provides technical comments to Contractor on Geotechnical Report and Technical Memorandum	September 20, 2000
7. Submit Task 10 - Preliminary Design Engineering (50% Design Effort)and Hydraulic Modeling and Technical Appendix	September 15, 2000
8. County provides technical comments to Contractor on Preliminary Design Engineering	September 27, 2000
9. Submit Task 10 on Recommended Alignment	September 15, 2000
10. County selects final alignment	September 27,2000
11. Submit all Permit Applications, Task	October 13, 2000

Item	Completion Date
11 Deliverables	
12. Submit Easement Legal Descriptions	October 20, 2000
13. Submit 10% Construction Drawings	August 15, 2000
14. Submit 50% Construction Drawings and Contract Specifications	October 6, 2000
15. Submit 90% Construction Drawings and Contract Specifications	November 3, 2000
16. County provides technical comments to Contractor on 90% Construction Drawings and Contract Specifications	November 15, 2000
17. Submit 100% Construction Drawings and Contract Specifications	November 30, 2000
18. Begin Advertising for Bids; (Plans available December 7 th)	December 5, 2000
12. Open Bids	January 2, 2001
13. Award Construction Contract	January 18, 2001
14. Start Construction	January 29, 2001
15. Submit 100% Construction Drawings and Specifications for North Alignment, Task 4B	December 29, 2000

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**Amendment No. 2 – Exhibit C
Compensation Schedule**

An estimate of personnel requirements for each task as described in the scope of work follows. Billings for work under Tasks 8 through Task 13 will be billed per the attached rate schedule. Subconsultants will be billed at cost plus 10 percent. Individual task budgets cannot be exceeded. Credits for work not required that was previously included in the original contract or Amendment No. 1 are as follows:

• Task 2A Credit	(\$ 1,567.50)
• Task 4A Credit	(\$16,800.00)
• Task 4B Additional Cost	\$11,925.00
• Amendment No. 2 Tasks 8 through 13	<u>\$175,000.00</u>
• Amendment No. 2 Total Amount	\$168,557.50

A summary of the original Contract, Amendment No. 1 and Amendment No. 2 is as follows:

• Original Contract Amount	\$287,240.00
• Amendment No. 1 Amount	\$ 65,693.00
• Amendment No. 2 Amount	<u>\$168,557.50</u>
Total Not to Exceed Amount	\$521,490.50

Fee Schedule

Effective May 1, 2000

Engineering:

Principal Engineer	\$105/Hour
Senior Engineer	\$88/Hour
Project Engineer	\$75/Hour
Engineering Intern II	\$65/Hour
Engineering Intern I	\$55/Hour
Senior Civil Engineering Designer	\$65/Hour
Civil Engineering Tech./CADD Operator II	\$55/Hour
Civil Engineering Tech./CADD Operator I	\$40/Hour

Surveying:

Director of Surveying	\$70/Hour
Professional Land Surveyor	\$65/Hour
Survey Party Chief	\$58/Hour
Survey Technician	\$40/Hour
1-Man Crew w/ Robotic Equipment	\$82/Hour

Planning:

Principal Planner	\$88/Hour
Planning Technician	\$55/Hour

Administrative:

Clerical	\$38/Hour
Office Aide	\$25/Hour

Copies, prints and local mileage expenses incurred as a result of a project are included within the hourly fees as shown. All application or review fees which are required by governing or reviewing agencies will be the responsibility of the client.

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**AMENDMENT NO. 2 - FOOTHILL SEWER PROJECT
EVALUATION OF ALTERNATE ALIGNMENT NO. 2 - Genoa Lane**

Scope of Services & Fee Proposal

**Summary of Estimated Man-hours by Personnel Classification & Task
July 24, 2000**

Task 8 - Sewer Master Plan/Facilities Plan Update (10% Design Report)

<u>Personnel</u>	<u>Estimated Man-hours</u>	<u>Billing Rate</u>	<u>Estimated Fee</u>
Principal Engineer	32 \$	105 \$	3,360
Senior Engineer	110 \$	88 \$	9,680
Engineering Intern	8 \$	55 \$	440
Senior Engineering Designer	40 \$	65 \$	2,600
Clerical	24 \$	38 \$	912
Subtotal			\$ 16,992

Task 9 - Design Investigations

<u>Personnel</u>	<u>Estimated Man-hours</u>	<u>Billing Rate</u>	<u>Estimated Fee</u>
Principal Engineer	10 \$	105 \$	1,050
Senior Engineer	16 \$	88 \$	1,408
Director of Surveying	12 \$	70 \$	840
Professional Land Surveyor	12 \$	65 \$	780
Survey Party Chief	60 \$	58 \$	3,480
Survey Technician	70 \$	40 \$	2,800
Engineering Intern	20 \$	55 \$	1,100
Senior Engineering Designer	40 \$	65 \$	2,600
Clerical	32 \$	38 \$	1,216
Subtotal			\$ 15,274
Geotechnical Investigation			\$ 21,010
Aerial Survey			\$ 21,000
Total			\$ 57,284

Task 10 - Preliminary Design Engineering (50% Design Effort)

<u>Personnel</u>	<u>Estimated Man-hours</u>	<u>Billing Rate</u>	<u>Estimated Fee</u>
Principal Engineer	40 \$	105 \$	4,200
Senior Engineer	150 \$	88 \$	13,200
Engineering Intern	80 \$	55 \$	4,400
Senior Engineering Designer	300 \$	65 \$	19,500
Clerical	40 \$	38 \$	1,520
Subtotal			\$ 42,820

Scope of Services & Fee Proposal
Summary of Estimated Man-hours by Personnel Classification & Task
July 24, 2000, Page 2 of 2

Task 11 - Permit Applications

<u>Personnel</u>	<u>Estimated Man-hours</u>	<u>Billing Rate</u>	<u>Estimated Fee</u>
Principal Engineer	24 \$	105 \$	2,520
Senior Engineer	40 \$	88 \$	3,520
Engineering Intern	60 \$	55 \$	3,300
Senior Engineering Designer	32 \$	65 \$	2,080
Clerical	12 \$	38 \$	456
Subtotal			\$ 11,876

Task 12 - Final Design Documents & Hydraulic Model

<u>Personnel</u>	<u>Estimated Man-hours</u>	<u>Billing Rate</u>	<u>Estimated Fee</u>
Principal Engineer	43 \$	105 \$	4,515
Senior Engineer	200 \$	88 \$	17,600
Engineering Intern	20 \$	55 \$	1,100
Senior Engineering Designer	120 \$	65 \$	7,800
Clerical	40 \$	38 \$	1,520
Subtotal			\$ 32,535
Electrical Engineer			\$ 14,750
Total			\$ 47,285

Task 13 - Right-of-Way and Easement Documents

<u>Personnel</u>	<u>Estimated Man-hours</u>	<u>Billing Rate</u>	<u>Estimated Fee</u>
Principal Engineer	16 \$	105 \$	1,680
Senior Engineer	16 \$	88 \$	1,408
Director of Surveying	32 \$	70 \$	2,240
Professional Land Surveyor	24 \$	65 \$	1,560
Engineering Intern	0 \$	55 \$	-
Senior Engineering Designer	48 \$	65 \$	3,120
Clerical	16 \$	38 \$	608
Subtotal			\$ 10,616
Grand Total			\$ 174,997

REQUESTED BY
DOUGLAS COUNTY
 IN OFFICIAL RECORDS OF
 DOUGLAS CO., NEVADA

2000 AUG 15 AM 11:27

LINDA SLATER
 RECORDER

\$ 0 PAID KJ DEPUTY

CERTIFIED COPY

The document to which this certificate is attached is a full, true and correct copy of the original on file and on record in my office.

DATE: August 15, 2000
 B. REED Clerk of the 9th Judicial District Court
 of the State of Nevada, in and for the County of Douglas.

By [Signature] Deputy

SEAL

Exhibit C
 Amendment No. 2

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