

ORDINANCE NO. 840

AN ORDINANCE AUTHORIZING THE MAYOR AND CITY RECORDER OF THE CITY OF CANBY, COUNTY OF CLACKAMAS, OREGON, TO EXECUTE A CONTRACT FOR ENGINEERING SERVICES IN CONNECTION WITH THE FACILITY PLAN AND RATE STUDY FOR UPGRADING THE CANBY WASTEWATER TREATMENT PLANT; AND DECLARING AN EMERGENCY

WHEREAS, the City of Canby desires to update the facility plan and rate analysis previously adopted and concerning the Canby Wastewater Treatment Plant; and

WHEREAS, the City desires to employ an engineer to research and prepare the facilities plan and rate analysis for the Canby Wastewater Treatment Plant; and

WHEREAS, The City heretofore requested engineering proposals from area engineers; and

WHEREAS, the Canby City Council determined that Brown and Caldwell, 9620 Southwest Barbur Boulevard, Portland, Oregon, would be the candidate they desired to provide such service, now therefore,

THE CITY OF CANBY ORDAINS AS FOLLOWS:

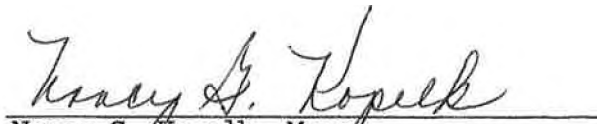
Section 1. the Mayor and City Recorder are hereby authorized and directed to make, execute, and deliver in the name of the City of Canby and on its behalf, an appropriate contract, attached hereto as "Exhibit A", with Brown and Caldwell for engineering services in connection with the preparation of a facilities plan and rate analysis for upgrading the wastewater treatment plant in Canby, Oregon, for an agreed upon price not to exceed \$47,000.00.

Section 2. An emergency is hereby declared to exist in order that the required plan and analysis can be started and completed as soon as possible to benefit the citizens of the City of Canby and this ordinance shall therefore take effect immediately upon its enactment after final reading.

SUBMITTED to the Canby City Council and read the first time at a regular meeting thereof on Wednesday February 7, 1990; ordered posted as provided by the Canby City Charter and scheduled for second reading and action of the City Council at a regular meeting thereof to be held on February 21, 1990, after the hour of 7:30 o'clock p.m., at the Council Chambers at the Canby City Hall in Canby, Oregon.


Marilyn K. Perkett, City Recorder

PASSED on second and final reading by the Canby City Council
at a regular meeting thereof on the 21st day of February, 1990,
by the following vote: YEAS 8 NAYS 0


Nancy G. Kopelk, Mayor

ATTEST:


Marilyn K. Perkett, City Recorder

**AGREEMENT FOR ENGINEERING SERVICES
BETWEEN CITY OF CANBY
AND BROWN AND CALDWELL
FOR
GENERAL ENGINEERING SERVICES**

THIS AGREEMENT, made and entered into on this 21st day of Feb, 1990, by and between the City of Canby, hereinafter referred to as "Owner," and Brown and Caldwell, Inc., a California corporation, authorized to provide engineering services in Oregon, hereinafter referred to as "Engineer",

WITNESSETH:

WHEREAS, the City of Canby desires to retain an engineer to assist in preparing a wastewater treatment plant feasibility plan and rate study update; and

WHEREAS, Engineer has available and offers to provide personnel and facilities necessary to accomplish the work within the required time;

NOW, THEREFORE, Owner and Engineer agree as follows:

I. DESCRIPTION OF PROJECT

Owner and Engineer agree that Project is as described in Exhibit A, entitled "Description of Project," dated January 3, 1990. If, during the course of Project, Owner and Engineer agree to changes in Project, such changes shall be incorporated in this Agreement by written amendment.

II. SCOPE OF ENGINEERING SERVICES

Engineer agrees to perform those services described hereafter. Unless modified in writing by both parties, duties of Engineer shall not be construed to exceed those services specifically set forth herein.

A. Planned Engineering Services

Engineer agrees to perform those planned tasks described in Exhibit B, entitled "Scope of Services," dated January 3, 1990.

B. Special Engineering Services

Owner and Engineer agree that not all work to be performed by Engineer can be defined in detail at the time this Agreement is executed, and that incidental engineering work related to Project and not covered in Exhibit B may be needed during performance of this Agreement.

Compensation for such services shall be as agreed to by Owner and Engineer, and set forth in the written authorization for Special Services.

Special engineering services include, but are not limited to:

1. Preparation of an operation and maintenance manual.
2. Start-up services.

III. SCOPE OF OWNER SERVICES

Owner agrees to provide facilities and equipment and to perform services which are particularly described as follows:

The Owner will provide the Engineer with related background information including plant operating data; solids management plan pretreatment program; discharge compliance records; and previous reports, documents, and manuals related to the wastewater systems. Owner will provide or assist the Engineer in obtaining financial information relevant to the rate study update.

Owner shall appoint an Owner's representative with respect to work to be performed under this Agreement. Owner's representative shall have complete authority to transmit instructions, receive information, and interpret and define Owner's policies. Engineer shall be entitled to rely on representations made by Owner's representative unless otherwise directed in writing by Owner.

IV. AUTHORIZATION, PROGRESS, AND COMPLETION

In signing this Agreement, Owner grants Engineer specific authorization to proceed with work described in Exhibit B. The estimated time for completion is within 180 calendar days of the effective date of this Agreement.

For special services and subsequent tasks, the authorization by the Owner shall be in writing and shall include the definition of the work to be done, the schedule for commencing and completing the work, and the basis for compensation for the work, all as agreed upon by the Owner and Engineer.

V. COMPENSATION

For the services described in Exhibit B, Owner agrees to pay, and Engineer agrees to accept, compensation in accordance with Exhibit C. Compensation shall be billed monthly in summary form. Payment to Engineer is due upon presentation of invoice to Owner. If payment is not made within 30 days, interest on the unpaid balance shall accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest rate permitted by law, whichever is less. Such interest is due and payable when the overdue payment is made.

VI. RESPONSIBILITY OF ENGINEER

Engineer is employed to render a professional service only, and any payments made to Engineer are compensation solely for such services rendered and recommendations made in carrying out the work. Engineer shall follow the practice of the engineering profession to make findings, provide opinions, make factual presentations, and provide professional advice and recommendations.

In performing construction management services, Engineer shall act as agent of Owner. Engineer's review or supervision of work prepared or performed by other individuals or firms employed by Owner shall not relieve those individuals or firms of complete responsibility for the adequacy of their work.

It is understood that any resident engineering or inspection provided by Engineer is for the purpose of determining compliance with the technical provisions of Project specifications and does not constitute any form of guarantee or insurance with respect to the performance of a contractor. Engineer does not assume responsibility for methods or appliances used by a contractor, for the safety of construction work, or for compliance by contractors with laws and regulations. Owner shall use its best efforts to assure that the construction contract requires that the contractor(s) indemnify Engineer and construction manager as well as Owner, and that the contractor(s) name Engineer and construction manager as additional insureds on contractor's insurance policies covering Project.

VII. INDEMNIFICATION

Engineer agrees to indemnify, defend, and hold Owner harmless from and against any liability arising out of the sole negligent errors or sole negligent omissions of Engineer, its agents, employees, or representatives, in the performance of Engineer's duties under this Agreement.

VIII. INSURANCE

During the life of this Agreement, Engineer shall maintain the following minimum insurance:

1. Comprehensive general liability insurance, including personal injury liability, blanket contractual liability, and broad-form property damage liability coverage. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000.
2. Automobile bodily injury and property damage liability insurance covering owned, non-owned, rented, and hired cars. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000.
3. Statutory workers' compensation and employer's liability insurance as required by state law.
4. Professional liability insurance. The limit of liability shall be not less than \$1,000,000.

Upon request, Engineer shall submit to Owner certificates of insurance for the policies listed above. The certificates shall provide that the insurance company give written notice to Owner at least 10 days prior to cancellation of or any material change in the policy.

IX. SUBCONTRACTS

Engineer shall be entitled, to the extent determined appropriate by Engineer, to subcontract any portion of the work to be performed under this Project. The Engineer shall be responsible to the Owner for the actions of persons and firms performing subcontract work.

The Engineer is authorized by the Owner to subcontract work having a cost which will not exceed 30 percent of the total amount of compensation due under this Agreement.

X. ASSIGNMENT

This Agreement is binding on the heirs, successors, and assigns of the parties hereto. This Agreement may not be assigned by Owner or Engineer without prior, written consent of the other.

XI. INTEGRATION

This Agreement represents the entire understanding of Owner and Engineer as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered herein. This Agreement may not be modified or altered except in writing signed by both parties.

XII. JURISDICTION

This Agreement shall be administered and interpreted under the laws of the State of Oregon. Jurisdiction of litigation arising from this Agreement shall be in that state.

If any part of this Agreement is found to conflict with applicable laws, such part shall be inoperative, null, and void insofar as it conflicts with said laws, but the remainder of this Agreement shall be in full force and effect.

In the event of any action for any purpose to enforce the terms of this contract, the losing party will pay the prevailing party attorney's fees in addition to other costs and disbursement allowed by law. The attorney's fees shall be in the amount adjudged reasonable by the court for prosecution of said suit or action, including appeal.

XIII. SUSPENSION OF WORK

Owner may suspend, in writing, all or a portion of the work under this Agreement if unforeseen circumstances beyond Owner's control make normal progress of the work impossible. Engineer may request that the work be suspended by notifying Owner, in writing, of circumstances that are interfering with the normal progress of work. Engineer may suspend work on Project in the event Owner does not pay invoices when due. The time for completion of the work shall be extended by the number of days work is suspended. If the period of suspension exceeds 90 days, the terms of this Agreement are subject to renegotiation, and both parties are granted the option to terminate work on the suspended portion of Project in accordance with Article XIV.

XIV. TERMINATION OF WORK

The Owner may terminate all or a portion of the work covered by this Agreement for its convenience. Owner or Engineer may terminate work if the other party fails to perform in accordance with the provisions of this Agreement by providing 15 days prior, written notice to the other by certified mail with receipt for delivery returned to the sender.

In the event of termination, Engineer shall perform such additional work as is necessary for the orderly filing of documents and closing of Project. The additional time for filing and closing shall not exceed 10 percent of the time expended on Project prior to the effective date of termination.

Engineer shall be compensated for the terminated portion of the work on the basis of work actually performed prior to the effective date of termination, plus work

required for filing and closing. Charges for the latter work are subject to the 10 percent limitation described in this Article.


XV. ARBITRATION


All claims, disputes, and other matters in question between the parties to this Agreement arising out of or relating to this Agreement or the breach thereof, which are not disposed by mutual agreement, shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. No arbitration arising out of or relating to this Agreement shall include any person not a party to this Agreement except by written consent signed by the parties hereto and persons to be joined. This agreement to arbitrate shall be specifically enforceable under prevailing arbitration law.

Notice of demand for arbitration shall be filed in writing with the other parties to this Agreement and with the American Arbitration Association. The demand shall be made within a reasonable time after the claim, dispute, or other matter in question has arisen, but in no event after the date when the institution of legal or equitable proceedings would be barred by the applicable statute of limitations. The award rendered by the arbitrators shall be final, and judgment may be entered in accordance with applicable law in any court having jurisdiction.

BROWN AND CALDWELL

CITY OF CANBY

Signature 

Signature 

Printed Name C.S. Zickefoose

Printed Name Nancy G. Kopelk

Title Vice President

Title Mayor

Date 1/3/90

Date 2/21/90

EXHIBIT A

DESCRIPTION OF PROJECT

In order to determine long range needs for wastewater facilities to meet growth needs and water quality regulations, and to identify means to finance capital programs and operation and maintenance costs, the City of Canby is contracting with Brown and Caldwell for certain engineering services. Specific activities covered by this contract include:

1. Gather and evaluate background information for the facilities and rate analysis.
2. Evaluate the existing treatment plant and prepare a report addressing existing capacity and projected future facility needs for liquids and solids handling.
3. Develop and evaluate alternatives for modifications and additions to assure meeting future facility needs.
4. Develop a staged plan that meets financial capabilities and growth needs.
5. Evaluate alternate financing alternatives to match identified staged capital projects and determine most applicable program for the City of Canby.
6. Determine rate structure to cover identified projects and operation and maintenance expenses.
7. Submit final plans in sufficient detail to commence pre-design tasks.

EXHIBIT B
SCOPE OF SERVICES

The following describes tasks to be performed in developing the wastewater treatment facilities plan and rate study update. In addition, other tasks are made available for implementation after receiving approval by City of Canby personnel authorized to negotiate contracts.

TASK 1.
BASIS FOR PLANNING

This task will establish the criteria for determining facility changes and/or alternative methods of meeting treatment needs for the City of Canby.

1.1.
Review Current Wastewater Characteristics

Determine the basic parameters for the projection of flows and for the evaluation of alternative plans by developing unit values for sanitary sewage, industrial waste, and I/I flows, and analyzing historical plant data with emphasis on recent two years.

1.2.
Determine Future Wastewater Characteristics

Analyze factors that will influence future planning, including future population and land use, identified in existing engineering plans and other relevant sources. Also incorporate impact of geography, topography, geology and soils, hydrology, and climate on plant expansion plans.

1.3.
Address Department of Environmental Quality (DEQ) Water Quality Facility Planning Expectations

Describe existing DEQ regulations regarding the following topics and their relationship to the City of Canby facilities plan:

- Mass Load Limitation.
- Surface Water Impacts.
- Toxic Substances and Mixing Zone Criteria.
- Minimum Treatment Criteria.
- Federal Secondary Treatment Regulations.
- Raw Sewage Bypass Elimination.
- Sludge Management.
- Groundwater Protection.

**TASK 2.
EXISTING WASTEWATER
TREATMENT SYSTEM
EVALUATION**

The current plant data and system will be evaluated in this task and a report will be prepared. Subtasks will include treatment capacity for each major liquids unit process.

**2.1.
Review Liquids Unit
Processes**

Prepare a table summarizing data including findings and estimate of remaining useful life. Develop a hydraulic profile identifying critical bottlenecks in the liquids treatment system.

**2.2.
Review Solids Unit
Processes**

Determine treatment capacity for each major solids unit process including grit, screenings, aerobic digester and solids lagoons. Prepare a table summarizing data and an estimate of remaining life. Describe potential impact of federal regulations described in the proposed Section 503 rules.

**TASK 3.
DRAFT REPORT
PREPARATION**

The findings and recommendations will be compiled in a facilities plan. Draft material will be reviewed at key points in the process and approved before submittal to administrative and regulatory review. Specific steps will include:

**3.1.
Review Existing Data**

Review existing facilities plan, prior Brown and Caldwell report on plant evaluation, and other documents pertaining to the plant to formulate the background for the updated plan. Process information contained in your plant computer data base will be incorporated into the draft document.

**3.2.
Plant Capacity
Assessment**

Describe results of liquids and solids assessment defining remaining life and projected capacity. This evaluation will address proposed future effluent requirements and regulations and describe impact on plant modifications and expansion.

**3.3
Progress Reports and
Plan Preparation**

The project manager will meet with your designated staff members at least monthly to provide project status information. These meetings will be either in Canby or the Brown and Caldwell Portland office.

**TASK 4.
DEVELOP AND
EVALUATE
ALTERNATIVES**

Data from the process evaluation and hydraulic profile analysis will form the basis of the alternatives analysis for both the liquids and solids streams. Each alternative will need to be tested against stringent regulations forecast for both effluent and solids disposal. Two brainstorming sessions will be held to review draft report material prior to producing final copy. Participants will be the Brown and Caldwell project manager and appropriate team members and City of Canby staff.

**4.1.
Liquids System
Alternatives**

Information collected and described in subtask 2.1. will provide the background for evaluating alternative secondary treatment system configurations. Your staff will be involved in the evaluation process. Ranking will include reliability, flexibility, projected operation and maintenance (O&M) costs, and ability to meet effluent quality.

**4.2.
Solids Handling
Alternatives**

Information collected and described in subtask 2.2. will provide the background for evaluating solids system alternatives. Ranking factors will address ability to meet Section 503 regulations, DEQ regulations, O&M costs, and ease of operation.

**TASK 5.
RECOMMENDED PLAN**

Following the alternatives analysis, the recommended alternative for both liquids and solids treatment will be determined, using an agreed upon ranking system.

**5.1.
Description of the
Project**

An illustrated narrative description will be developed with tables showing design criteria in sufficient detail to facilitate moving to the predesign stage.

**5.2.
Estimated Project Cost**

The recommended alternative life cycle costs will be shown in tabular form in sufficient detail to be factored directly into the rate analysis. A narrative description will detail the basis for the costs.

**TASK 6.
FINAL REPORT
PRESENTATION AND
REPRODUCTION**

6.1.
Plan Presentation

Two presentations to the administrative staff and council will be made. The first will be a "brief briefing" at the approximate mid-point in the study to describe the scope of work and outline the format of the final document. The second will be a more formal presentation of the findings and how they relate to the second document - "Canby Sewer Rate Analysis," described in subsequent tasks.

6.2.
Plan Reproduction

Fifty (50) copies of the report will be reproduced and bound for distribution just prior to the final council presentation.

TASK 7.
COST ANALYSIS

7.1.
Operation and Maintenance Costs

Determine for both labor and non-labor costs, for both collection system and plant operation. These results will be used in the financial analysis.

7.2.
Capital Additions and Equipment

Determine capital modification or expansion and equipment costs based on the alternatives decisions in the facilities plan. Scheduling of capital purchases will depend on the recommendations in the plan.

TASK 8.
EVALUATE CAPITAL FINANCING ALTERNATIVES

Review and analyze feasible methods of financing the capital improvements recommended in the facilities plan. Select criteria for making evaluations and for selecting the most appropriate alternative and then will recommend the most appropriate alternative. These subtasks will accomplish this aim:

8.1.
Review City's Current Financing Policy

Review current financing policy, community and staff attitudes about debt, existing debt outstanding, credit rating, and any other information appropriate to evaluating financing alternatives. City staff will provide or assist in obtaining necessary documents.

8.2.
Review Financing
Alternatives

Review financing alternatives including:

- Long-term debt:
 - General obligation bonds
 - Revenue bonds (including certificates of participation)
- Pay-as-you-go (capital expenditures from current revenues):
 - Connection and/or capacity charges
 - User charges
- Reserves
- State revolving fund
- Other grant and load funds
- Lottery funds
- Appropriate combinations of the above

8.3.
Establish Selection
Criteria

Select criteria to be used in evaluating financing alternatives and choosing the most appropriate alternative. Criteria to be considered include:

- Cost of issue
- Bond market conditions
- Credit enhancement requirements
- Size of capital improvement program (CIP)
- Level of city wastewater utility reserves
- Ease of implementation
- Effect on city's credit rating
- Impact on rates and charges
- Flexibility
- Perceived public attitude about debt/user charges

8.4.
Recommend Financing
Alternative

Evaluate the financing alternatives listed in Subtask 8.2 with respect to the selection criteria listed in Subtask 8.3. After ranking each alternative and combination of alternatives according to how they meet the criteria. Recommend the agreed upon alternative.

TASK 9.
DETERMINE RATES TO
MEET ANNUAL
REVENUE
REQUIREMENTS

Annual revenue requirements consist of both O&M expenses and capital costs. Capital costs consist of debt service payments and capital expenditures paid directly from revenues. Capital costs can be divided into two categories:

- Costs that benefit new applicants for service and therefore should be recovered through connection fees and capacity charges.
- Costs that benefit existing customers and therefore should be recovered through rates.

Determine the level of rates and charges necessary to fund operations in a manner that is equitable in the following subtasks:

9.1.
Review and Analyze
Financial and
Engineering Information

Analyze wastewater rate schedules, accounting records, annual reports, budgets, capital improvement programs, and any other information relevant to the rate study. Existing records and reports from your department and the Canby Utility Board (CUB) will be used as resources.

TASK 10.
ANALYZE IMPACT OF
WASTEWATER
CHARACTERISTICS

The result of this task will be projected customer wastewater characteristics, including maximum monthly and annual flow, I/I, and the number of connections, for a proposed base year and each subsequent year of the study period.

10.1.
Review Water Use

Analyze the city's existing customer use statistics by examining data on water use (both winter and annual), plant influent, and any other sampling or metered wastewater information.

10.2.
Forecast Future
Conditions

Review prior discharge characteristics and existing projections of customer discharge characteristics. Forecast probable customer discharge characteristics for the proposed base year, taking into account projected changes in the number of customers and/or the customer mix.

10.3.
Define Customer
Categories

Using the results of Subtasks 10.1 and 10.2, project customer wastewater characteristics for the functional categories of peak flow, BOD, Total Suspended Solids, annual flow, I/I, and number of customers for the defined study period.

TASK 11.
DETERMINE FINANCING
AND CAPITAL-RELATED
REVENUE
REQUIREMENTS

The product of this task is the estimation of annual revenue requirements resulting from the replacement, improvement, and expansion projects in your most recent capital improvement program. Subtasks include:

11.1.
Capital Projects Plan

Plan for funding capital projects from user charges and connection fees based upon deriving cash needs from those customer classes which benefit from the expenditure.

11.2.
Review Alternatives

Determine annual capital-related revenue requirements and the amounts to be obtained from user charges and connection fees under the most appropriate financing alternatives for the proposed study period.

TASK 12.
ANALYZE OPERATION
AND MAINTENANCE
EXPENSES

Analyze current O&M expenses to form a basis for projecting future expenses. To project O&M expenses, perform the following subtasks:

12.1.
Analyze Expenses and
Cost Factors

Analyze current and prior-year expenses, formulate cost-influencing factors (inflation, increase in flow, and changes to the system), and determine appropriate replacement fund accruals or depreciation.

12.2.
Determine Reserves and
Influence on CIP

Determine appropriate reserve requirements, and additional requirements associated with your CIP and the recommendations set forth in Task 8.4.

12.3.
Project Expenses

Project expense levels for the study period which are consistent with projections of customer wastewater characteristics, inflation, and the proposed capital improvement and expansion projects.

TASK 13.
DETERMINE REVENUE REQUIREMENTS

Total revenue requirements for each year of the study period will be summarized from the results of Subtasks 11.1 and 11.2. These revenue requirements will be separated into:

- Those to be derived from existing ratepayers through rates and other charges.
- Those more properly obtained from new applicants for service through connection fees and/or capacity charges.

TASK 14.
DEVELOP WASTEWATER USER CHARGES

Develop user charges for each customer class based on the cost of service for each year of the study period.

TASK 15.
DEVELOP CONNECTION FEES

Examine connection fees for the study period which will result in recovery of the following costs from new applicants for wastewater service:

- The cost of unused existing capacity.
- The incremental costs associated with system expansion from new applicants for wastewater service.

TASK 16.
FINAL REPORT PREPARATION AND PRESENTATION

Present preliminary findings to Mike Jordan, City Administrator, on a scheduled basis. The Brown and Caldwell project manager will be available to present at least one interim report to the council if deemed advisable by the Administrator.

A formal presentation of findings will follow publication of the final report.

**TASK 17.
PREPARE PRE-DESIGN
REPORT**

(Scope of work and fees to be negotiated).

**TASK 18.
TREATMENT PLANT
DESIGN**

(Scope of work and fees to be negotiated).

EXHIBIT C
COMPENSATION

Compensation for services provided under Article II, "Scope of Engineering Services," and described in Exhibit B, shall be the lump sum of \$47,000. This price shall be modified only if the scope of work is changed.

Engineer shall submit periodic invoices to Owner, and Owner shall pay invoices in accordance with Article V of this Agreement. Periodic billing shall be based either on a percentage complete of Project or on specific milestones, as determined by Engineer and approved by Owner.

BROWN AND CALDWELL
 SCHEDULE OF HOURLY BILLING RATES
 EFFECTIVE SEPTEMBER 30, 1989

PERSONNEL CLASSIFICATION	HOURLY BILLING RATE
ENGINEERING	
EXECUTIVE ENGINEER	125.96
CHIEF ENGINEER	125.96
MANAGING ENGINEER	115.27
SUPERVISING ENGINEER	102.12
PRINCIPAL ENGINEER	90.64
SENIOR ENGINEER	79.35
ENGINEER	68.19
ASSOCIATE ENGINEER	57.97
ASSISTANT ENGINEER	49.07
SUPERVISING CONSTRUCTION ENGINEER/INSPECTOR	102.12
PRINCIPAL CONSTRUCTION ENGINEER/INSPECTOR	90.64
SENIOR CONSTRUCTION ENGINEER/INSPECTOR	79.35
INSPECTOR	68.19
ASSISTANT INSPECTOR	49.07
TECHNICAL	
SENIOR ENGINEERING TECHNICIAN	68.19
ENGINEERING TECHNICIAN	57.97
ASSOCIATE ENGINEERING TECHNICIAN	49.07
ASSISTANT ENGINEERING TECHNICIAN	40.84
STUDENT TRAINEE II	33.47
STUDENT TRAINEE I	27.56
CHIEF DRAFTER	79.35
SUPERVISING DRAFTER	68.19
LEAD DRAFTER	57.97
SENIOR DRAFTER	49.07
DRAFTER	40.84
ASSISTANT DRAFTER	33.47
DRAFTER TRAINEE	27.56
COMPUTER DRAFTING SUPERVISOR/OPERATOR	68.19
COMPUTER DRAFTING SENIOR OPERATOR	49.07
COMPUTER OPERATIONS SUPERVISOR	40.84
COMPUTER SCHEDULER	33.47
CHIEF DESIGNER	102.12
SUPERVISING DESIGNER	90.64
PRINCIPAL DESIGNER	79.35
SENIOR DESIGNER	68.19
DESIGNER	57.97
ASSISTANT DESIGNER	49.07
TECHNICAL WRITER	57.97
SENIOR PROJECT COORDINATOR	57.97
PROJECT ASSISTANT	27.56

BROWN AND CALDWELL
 SCHEDULE OF HOURLY BASE RATES
 EFFECTIVE SEPTEMBER 30, 1989

PERSONNEL CLASSIFICATION	HOURLY SALARY RATE DOLLARS		
ENGINEERING			
EXECUTIVE ENGINEER	35.43	TO	41.54
CHIEF ENGINEER	35.43	TO	41.54
MANAGING ENGINEER	32.05	TO	37.61
SUPERVISING ENGINEER	28.75	TO	33.71
PRINCIPAL ENGINEER	25.53	TO	29.90
SENIOR ENGINEER	22.33	TO	26.16
ENGINEER	19.21	TO	22.47
ASSOCIATE ENGINEER	15.97	TO	19.58
ASSISTANT ENGINEER	13.52	TO	16.42
SUPERVISING CONSTRUCTION ENGINEER/INSPECTOR	28.75	TO	33.71
PRINCIPAL CONSTRUCTION ENGINEER/INSPECTOR	25.53	TO	29.90
SENIOR CONSTRUCTION ENGINEER/INSPECTOR	22.33	TO	26.16
INSPECTOR	19.21	TO	22.47
ASSISTANT INSPECTOR	13.52	TO	16.42
TECHNICAL			
SENIOR ENGINEERING TECHNICIAN	19.21	TO	22.47
ENGINEERING TECHNICIAN	15.97	TO	19.58
ASSOCIATE ENGINEERING TECHNICIAN	13.52	TO	16.42
ASSISTANT ENGINEERING TECHNICIAN	11.28	TO	13.75
STUDENT TRAINEE II	9.27	TO	11.28
STUDENT TRAINEE I	7.63	TO	9.27
CHIEF DRAFTER	22.33	TO	26.16
SUPERVISING DRAFTER	19.21	TO	22.47
LEAD DRAFTER	15.97	TO	19.58
SENIOR DRAFTER	13.52	TO	16.42
DRAFTER	11.28	TO	13.75
ASSISTANT DRAFTER	9.27	TO	11.28
DRAFTER TRAINEE	7.63	TO	9.27
COMPUTER DRAFTING SUPERVISOR/OPERATOR	19.21	TO	22.47
COMPUTER DRAFTING SENIOR OPERATOR	13.52	TO	16.42
COMPUTER OPERATIONS SUPERVISOR	11.28	TO	13.75
COMPUTER SCHEDULER	9.27	TO	11.28
CHIEF DESIGNER	28.75	TO	33.71
SUPERVISING DESIGNER	25.53	TO	29.90
PRINCIPAL DESIGNER	22.33	TO	26.16
SENIOR DESIGNER	19.21	TO	22.47
DESIGNER	15.97	TO	19.58
ASSISTANT DESIGNER	13.52	TO	16.42
TECHNICAL WRITER	15.97	TO	19.58
SENIOR PROJECT COORDINATOR	15.97	TO	19.58
PROJECT ASSISTANT	7.63	TO	9.27