

RESOLUTION NO. 1173

A RESOLUTION AUTHORIZING THE MAYOR TO ENTER INTO AN AGREEMENT WITH THE U.S. ARMY CORPS OF ENGINEERS FOR A MARKET FEASIBILITY STUDY FOR THE SEWAGE TREATMENT PLANT

WHEREAS, the City engaged the services of a consultant to examine the capacity of the existing sewage treatment plant and was advised that improvements costing approximately \$7.5 million would be needed within the next several years; and

WHEREAS, the Council wanted to consider other alternatives before expending such a large sum of money on the plant at its current site; and

WHEREAS, the U.S. Army Corps of Engineers has a program entitled "Partners for Environmental Progress" in which assistance is provided to local jurisdictions on a cost-sharing basis; and

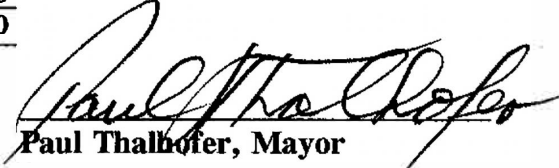
WHEREAS, the City applied for and was accepted into this program for the purpose of conducting a Market Feasibility Study for the sewage treatment plant; and

WHEREAS, funds for the City's share of this study were requested and have been recommended for approval by the Budget Committee in the FY 1995-96 Budget.

NOW THEREFORE BE IT RESOLVED BY THE COUNCIL OF THE CITY OF TROUTDALE

The Mayor is authorized to enter into an Agreement with the U.S. Army Corps of Engineers for a Market Feasibility Study of the sewage treatment plant.

YEAS: 7
NAYS: 0
ABSTAINED: 0


Paul Thalhofer, Mayor

Dated: MAY 25, 1995


George Martinez, City Recorder

Adopted: 5-23-95

AGREEMENT
BETWEEN THE DEPARTMENT OF THE ARMY
AND
THE CITY OF TROUTDALE
MARKET FEASIBILITY STUDY
SEWAGE TREATMENT PLANT OPTIONS

THIS AGREEMENT, entered into this 23 day of MAY 1995, by and between the Department of the Army, U. S. Army Corps of Engineers, Portland District (herein-after called the "Government"), represented by the Contracting Officer executing this Agreement and the City of Troutdale (hereinafter called the "Sponsor"),

WITNESSETH, that

WHEREAS, the Corps of Engineers is authorized to conduct Market Feasibility Studies to assist local communities in identifying infrastructure related needs and opportunities for investments in environmental service facilities; and

WHEREAS, the Sponsor considers it in its best interest to have the Study promptly completed, and is willing to contribute (50 percent) of the total Study Cost in in-kind services to facilitate its prompt completion; and

NOW THEREFORE, the parties agree as follows:

ARTICLE I - DEFINITIONS

For the purpose of this Agreement:

a. The term "in-kind services" shall mean all services required to be provided by the Sponsor in accordance with this Agreement including, but not limited to work or services carried out by the Sponsor with in-house personnel or by contract.

b. The term "study costs" shall mean all out-of-pocket costs and in-kind services incurred in connection with the study as specified in Articles II and IV.

c. The term "Study Period" shall mean the time period for conducting the Study commencing with the execution of this Agreement and ending with submittal of a final report to North Pacific Division for approval of the report for public release.

ARTICLE II - OBLIGATIONS OF PARTIES

a. The Sponsor and the Government, shall expeditiously prosecute and complete the Study currently estimated to be completed in ten months from the date of the signature of this Agreement, substantially in compliance with Article III herein, and in conformance with applicable Federal and State laws and regulations.

b. The Government shall provide 50 percent of all Study Costs, which Study Cost is currently estimated at \$75,000 as specified in Article IV herein. The Sponsor shall provide in-kind services and/or contracts, 50 percent of all such Study Costs.

c. The award of any contract with a third party of services in furtherance of this Agreement which obligates Federal appropriations shall be exclusively within the control of the Government. The award of any contract by the Sponsor with a third party for services in furtherance of this Agreement which obligates funds of the Sponsor and does not obligate Federal appropriations shall be exclusively within the control of the Sponsor.

d. The Government and the Sponsor shall each make every effort to assign the necessary resources to provide for the prompt and proper execution of the Study and shall, within the limits of law and regulation, conduct the Study with maximum flexibility.

ARTICLE III - SCOPE OF STUDY

Appendix A, the Scope of Study, and Appendix B, the associated Study Cost Estimate are hereby incorporated into this Agreement. The parties to this Agreement shall substantially comply with the Scope of Study in prosecuting work on the Study. The following modifications shall require an amendment to this Agreement:

a. any modification which increases the total Study Cost by more than ten (10) percent (see Appendix B);

b. any extension of the study completion date of more than thirty (30) days; or

c. Any reassignment of work items between the Sponsor and the Government (see Appendices A and B).

ARTICLE IV - METHOD OF PAYMENT

a. The Government shall endeavor to obtain the appropriations for the amount specified in the Scope of Study incorporated herein. Subject to the enactment of Federal appropriations and the allotment of funds to the Contracting Officer, the Government shall then fund the Study at least in the amounts specified herein. Funds may not be expended for any other purposes.

b. Subject to occurrence of funding of the study by the Government the Sponsor shall deliver such in-kind services and/or contracts as required by this Agreement and scheduled in Appendix A.

ARTICLE V - DISPUTES

a. The parties shall endeavor in good faith to negotiate the resolution of conflicts. Any dispute arising under this Agreement which is not disposed of by mutual consent shall be referred to an objective third party mutually agreed upon by the parties. The third party shall resolve such conflicts or determine a mutually agreeable process for reaching a resolution or for termination under Article IX herein.

b. Pending final decision of a dispute hereunder, or pending suspension or termination of this agreement under Article IX herein, the parties hereto shall proceed diligently with the performance of this Agreement.

ARTICLE VI - MAINTENANCE OF RECORDS

The Government and the Sponsor shall keep books, records, documents and other evidence pertaining to study costs and expenses incurred pursuant to this Agreement to the extent and in such detail as will properly reflect total study costs. The Government and the Sponsor shall maintain such books, records, documents and other evidence for inspection and audit by authorized representatives of the parties to this Agreement.

ARTICLE VII - RELATIONSHIP OF PARTIES

a. The parties to this Agreement act in an independent capacity in the performance of their respective functions under this Agreement and neither party is to be considered the officer, agent, or employer of the other.

b. To prevent conclusive findings, recommendations and information from being prematurely and or indiscriminately released against the wishes of either party and to avert misinterpretations and misunderstandings, the following is

effected for the period of this agreement: Prior to approval for public release, except where applicable law otherwise require disclosure, final study determinations, including reports, documents, data, findings, conclusions, and recommendations pertaining to the Study, shall not be released without the consent of both parties, nor shall they be represented as presenting the views of either party unless both parties shall indicate explicit agreement.

ARTICLE VIII - OFFICIALS NOT TO BENEFIT

No member of or delegate to the Congress, or other elected officials, shall be admitted to any share or part of this Agreement, or to any personal benefit that may arise therefrom.

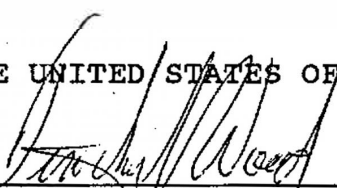
ARTICLE IX - TERMINATION OR SUSPENSION

a. This Agreement shall be terminated at the completion of the Study Period; provided, that upon thirty (30) days written notice, either party may terminate or suspend this Agreement without penalty.

b. Within ninety (90) days following termination of this Agreement the Government shall prepare a final accounting of the Study Cost, which shall include expenditures by the Government of Federal funds towards the study and/or the cost of in-house services provided by the Government towards the study, and the value of in-kind services provided by the Sponsor.


IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA



Timothy L. Wood
Colonel, Corps of Engineers
District Commander

SPONSOR



Paul A. Thalhofer
Mayor
City of Troutdale

Appendix A-Scope of Study
Appendix B-Study Cost Estimate

CERTIFICATE OF AUTHORITY

I, Timothy J. Sercombe, do hereby certify that I am the Chief Legal Counsel for the City of Troutdale and that the City of Troutdale is a legally constituted public body with full authority and legal capability to perform the terms of the agreement between the United States of America and the City of Troutdale in connection with Troutdale Sewage Treatment Plant Market Feasibility Study and that the persons who have executed this Agreement on behalf of the City of Troutdale have acted within their charter and ordinance authority.

IN WITNESS WHEREOF, I have made and executed this certificate this _____ day of _____, AD., 199__.

City Attorney
for City of Troutdale

APPENDIX A
STATEMENT OF WORK
Market Feasibility Study for City of Troutdale's Sewage Treatment Plant
05/15/95

1. Introduction

This Appendix specifies tasks and responsibilities of the City of Troutdale and the U.S. Army Corps of Engineers for the Market Feasibility Study for the possible relocation and privatization of the City of Troutdale's sewage treatment plant. This Appendix is part of the Market Feasibility Study Agreement between the City of Troutdale, Oregon and the Corps of Engineers.

2. Study Authority

The authority for conducting this Fiscal Year 1995 "Market Feasibility Study" with the City of Troutdale, Oregon (the "sponsor") is drawn from the House Report accompanying the Fiscal Year 1991 Appropriations Act (Public Law No. 101-514). This act provided the Congressional intent for the Corps of Engineers to conduct jointly financed studies in partnership with eligible non-Federal partners, including local governments and other public entities. Funding for the FY 1995 program was provided by the Energy and Water Development Appropriations Act for Fiscal year 1995. The Partners for Environmental Progress (PEP) Program provides the mechanism for conducting these joint market feasibility studies.

3. Study Purpose and Scope

Troutdale, a municipal corporation in the State of Oregon with a population of about 10,500, is located in the northwest portion of the state, immediately south of the Columbia River and about 15 miles east of the City of Portland. The City-owned-and-operated sewage treatment plant is located in the downtown business portion of the City adjacent to a recently-constructed Factory Outlet Mall. Originally constructed in 1969, the plant has been upgraded over the years and now has a capacity of 1.6 million gallons per day.

This study is designed to address several concerns that the City has about the treatment plant. An on-going plant capacity study has shown that the City's 6 percent annual growth rate over the past 5 years will probably continue and the plant will require an additional \$7.5 million of improvements in the near future. The City is interested in determining the feasibility of constructing a new facility in a more remote location away from the business area before expending such a large sum.

In addition, high operating expenses and a large debt payment have resulted in the City having one of the highest sewer rates in the area. The City is interested in evaluating privatization as a means of reducing sewer rates or slowing the growth of sewer rates.

Finally, the City discharges its wastewater to the nearby Sandy River under a permit issued by the Oregon Department of Environmental Quality. In 9 of the last 18 months the City has failed to meet one or more permit requirements and has had to place limits on the amount of pollutants some of the industrial users may discharge to the plant. The City is interested in a prompt feasibility study that will allow it to make the necessary decisions concerning future location and operation of the plant.

The scope of study includes the following:

- Analyze the costs and other relevant factors for four options: (a) improvements to the existing plant; (b) construction of a new plant away from the business area; (c) join with the cities of Fairview and Wood Village who already use the City of Gresham's privately-operated plant and utilize that facility; and (d) construct a new plant to be utilized with Fairview and Wood Village.
- Analyze the costs and other relevant factors for municipal vs. private operation for each option, recognizing that private operation is the only alternative for option "c".
- Propose applicable financing alternatives.
- Conduct public involvement meeting.
- Report on findings and recommendations for further action.

4. Prior Studies

In 1994 the City of Troutdale contracted with CH2M-HILL to identify improvements required at the treatment plant to meet the City's needs at projected buildout (year 2021). CH2M-HILL reported the findings of the study in January 1995 in a report titled "City of Troutdale Sewage Treatment Plant Capacity and Local Limits Study." This study reviewed historical flows and loads to the treatment plant, discussed results of some field tests, identified needed short and long term improvements, and reviewed local limits for three major industries. One potential alternative was identified with a cost estimate of approximately \$7.5 million. This study will provide much information for the first alternative (upgrade existing plant) that will be investigated in this market feasibility study.

5. Study Tasks

This section identifies all study tasks and lead responsibility for each task.

5.1 *Description of Study Area*

A brief description of the study area shall be made. The objective of this task is to provide one or two pages of background information, supplemented with maps, that introduces the reader to the area. The description shall include the following:

5.1.1 Location. Maps showing the location of the City of Troutdale as well as Wood Village, Fairview and Gresham shall be made.

5.1.2 Physical Profile. The physical features of the study area, including land area, city boundaries, topographical details, and rivers, shall be described. Maps shall be developed as appropriate.

5.1.3 Land Use. Land use/zoning maps for the study area shall be made. Recent City annexations or possible future annexations shall be investigated.

5.1.4 Population and Housing. Data on population and housing for the City of Troutdale for the last 25 years shall be gathered. If the City does not already have this data, it shall be obtained from the Center for Population Research at Portland State University or other acceptable source. Also, population and household estimates for the other cities in the study area shall be made.

5.1.5 Employment and Income. Using existing data sources such as the Bureau of Census, per capita or household income for Troutdale shall be estimated. Employment information for the larger industries in Troutdale shall be gathered.

5.2 *Problem Statement*

A brief summary of the existing sewage treatment plant, design capacity, historical and future flows and loads and of remaining capacity shall be made in this section. This information will be extracted from the City of Troutdale's Capacity and Local Limits Study, prepared by CH2M HILL, January 1995. The goal of this part of the study is to explain the problem the City of Troutdale faces with regard to its sewage treatment plant. No new analysis of the current STP will be made. The tasks include but are not necessarily limited to the following:

5.2.1 Describe the Current System. A non-detailed engineering description of the current system shall be made. The CH2M HILL study (Technical Memorandum No. 1)

shall be the basis for this description which shall include type of system, main components, construction dates, and design capacity of the system broken down by component.

5.2.2 Summarize Data on Sewage Flows and Loads. The CH2M HILL study (Technical Memorandum No. 1) and city records will be the source for this data. The study shall provide details on wastewater supply including historical flows and loads including sectoral detail, seasonal patterns, and per capita flows and loads.

5.2.3 Project flows and loads. The CH2M HILL study (Technical Memorandum No. 2) estimates flows and wasteloads to the City's treatment plant at buildout. These estimates shall be summarized. Tasks are:

- Describe the key factor(s)--probably population and large industrial firms--affecting flows and loads.
- Summarize City/CH2M HILL population projections and present these projections.
- Present other key factors, if any.
- Summarize the CH2M HILL wastewater flow and wasteload projections and summarize these projections.

5.2.4 Summarize Remaining Capacity for the City's STP. CH2M HILL (Technical Memorandum No. 4) estimated remaining capacities of the plant's existing units. These estimates shall be summarized. The information extracted from the CH2M-HILL report will serve to describe why the current plant is inadequate to meet future loads and flows.

5.3 *Sewage Treatment Plant Alternatives*

In this section four alternatives for meeting the City's wastewater treatment needs shall be examined:

- Improvements to the existing plant.
- Construction of a new plant away from the business area.
- Utilize the City of Gresham's privately-operated plant along with the cities of Fairview and Wood Village.
- Construct a new plant to be jointly used with Fairview and Wood Village.

Non-detailed engineering descriptions and order-of-magnitude costs estimates for the alternatives shall be provided.

5.3.1 Alternative 1: Improvements to the Existing Plant. Most of the information for this alternative will be taken from the CH2M-HILL report.

- a. Summarize the CH2M-HILL study recommendations. The improvements recommended by CH2M-HILL, the assumptions on which the recommendations are based, and the ordering of implementation shall be reviewed.
- b. Summarize construction cost estimates. The CH2M-HILL order-of-magnitude cost estimate for construction shall be reviewed. The CH2M-HILL estimates shall be revised if obvious errors or omissions are discovered.
- c. Identify other factors. Other relevant factors shall be identified and assessed at a non-detailed level. These factors may include alternative uses of the land at the present STP site and environmental considerations, for example.

5.3.2 Alternative 2: Construction of a new plant away from the business area. This option involves a new plant to serve only the City of Troutdale, probably located north of Interstate-84. The study shall propose the type and size of plant adequate to meet Troutdale's requirements at buildout, determine land requirements and potential locations, provide an order-of-magnitude cost estimate for construction, and evaluate other factors.

- a. Determine the type and size of plant. Given the expected flows and loads, the type and scale of plant shall be determined. Non-detailed conceptual descriptions of the plant shall be developed, with graphics as appropriate.
- b. Determine possible locations. Potential sites for the plant location shall be researched, taking into account engineering requirements, permitted land uses, ownership, environmental considerations. Acquisition costs of a preferred site shall be estimated. Maps showing the location shall be developed.
- c. Develop construction cost estimate. A non-detailed cost estimate of plant construction, associated sewer lines and pumps, and land and rights of way shall be made. The costs of removing the existing plant will not be estimated.
- d. Evaluate other factors. Other relevant factors shall be identified at a non-detailed level. These other factors may include, for example, disposition of the existing plant and discharge site considerations.

5.3.3 Alternative 3: Utilize the City of Gresham's privately-operated plant. Under this alternative, the City of Troutdale would utilize the City of Gresham sewage treatment plant in a joint arrangement with the cities of Fairview and Wood Village who already send their wastewater to the Gresham STP.

- a. Determine the municipalities' willingness to participate. Initial contacts shall be made with city officials of Wood Village, Fairview, and Gresham to explore the willingness of all parties to consider this option before significant effort is expended on engineering analysis. The principal concerns of these communities shall be identified.
- b. Evaluate the required capacity of the City of Gresham's plant. This task would determine what future capacity at the Gresham STP would be required to meet the

additional flows and loads from Troutdale. Gresham is already planning an expansion of the plant to meet future expected growth. If it is determined that the planned Gresham expansion can be reasonably modified to accommodate prospective Troutdale flows and loads, further analysis of this alternative will proceed. On the other hand if it is determined that the addition of Troutdale wastewater would necessitate substantial modification of the Gresham plant in terms of components, size or location, no further analysis of the alternative will be made in this study. In the latter event the City of Troutdale may elect to pursue further analysis of this alternative outside this study, and the results of that further analysis will be summarized in this feasibility study if available at the time this market feasibility study report is produced.

c. Develop conceptual engineering features. General features of the system shall be specified, including expansion of the Gresham plant, sewage lines and pumps as well as the general location of the elements. Appropriate graphics shall be drawn to illustrate the conceptual design.

d. Estimate construction costs. This shall include two general categories: (1) an estimate of the costs of the transmission and pumping elements of the design including land and rights-of-way; and (2) an estimate of the incrementally higher expansion costs of the Gresham plant, that increment being associated with the additional Troutdale flows/loads. However, if it is determined in 5.3.3.e below that the City of Gresham's method of charge for the use of the facility would be to sell capacity to Troutdale, an estimate of the charge will be made in lieu of the incrementally higher expansion costs in (2) of this subparagraph.

e. Evaluate other factors. Evaluate factors other than cost that may be relevant. This shall include whatever charge and method of charge that Gresham may impose for use of the facility.

5.3.4 Alternative 4: Construction of a new plant to serve Troutdale, Fairview and Wood Village. The objective of this task is to evaluate institutional factors, to develop conceptual engineering design, and to evaluate costs and other relevant factors for a new sewage treatment plant to serve Troutdale, Fairview and Wood Village. Again, the analysis will be very non-detailed, as dictated by study time and budgets.

a. Determine the municipalities' willingness to participate. Initial contacts shall be made with city officials of Wood Village and Fairview to explore the willingness of all parties to consider this option before effort is expended on engineering analysis. The principal concerns these communities may have will be identified.

b. Determine the required design capacity. Based on projected flows and loads for all cities and on reliability requirements, the design capacity of the plant shall be determined.

- c. Determine site. Potential sites for the plant location shall be identified, taking into account engineering requirements, permitted land uses, ownership, environmental considerations. Maps showing the location shall be developed.
- d. Develop conceptual engineering features. General features of the system shall be specified, including the plant components, sewage lines, and pumps as well as the general location of the features. Appropriate graphics shall be produced to illustrate the conceptual design.
- e. Estimate construction costs. A non-detailed construction cost estimate based on generic designs shall be made. This shall include the costs of plant, sewer lines, pumps, land, rights-of-way and other features of the design.
- f. Identify and evaluate other factors. Identify and evaluate factors other than construction cost that may be relevant to the choice of an option. Included is a non-detailed analysis of the cost and method for Fairview and Wood Village to recoup their investment in the Gresham plant.

5.4 *Analyze Municipal vs. Private Operation: Costs and Other Factors*

The objective of this task is to provide a comparison of operating costs between municipal operation and private sector operation for each option.

5.4.1 Determine costs and rates of City of Troutdale STP. Operating cost data for the existing Troutdale plant shall be gathered and presented. Sewer rates shall also be gathered and presented.

5.4.2 Present costs and rates for other systems. For comparison purposes the operating costs and rates for the Gresham plant and other comparable sewer districts shall be gathered. The goal is to provide a range of costs and rates for both municipally-operated and privately-operated facilities.

5.4.3 Estimate operating costs for each alternative under the assumption of (a) municipal operation and (b) private operation. For alternative III, joint tie-in to the Gresham plant, only private operation shall be considered.

5.4.4 Identify and evaluate other relevant factors for municipal versus private operation.

5.5 *Propose Applicable Financing Alternatives*

A number of options for financing modernization or construction of new facilities shall be investigated, including municipal bonds and loans and grants from state or federal agencies.

5.5.1 Identify financing sources. Working with the Oregon Department of Environmental Quality, Oregon Economic Development Department and other appropriate agencies, the study team shall identify financing possibilities. For each source of financing that is proposed, the study shall present the important features such as amounts available, maturities, and interest rates.

5.5.2 Determine suitability for City of Troutdale. The advantages and disadvantages of the financing sources shall be evaluated for implementation at the City of Troutdale and other participating communities, if any.

5.5.3 Estimate relative rate impacts. The team shall determine the effect on sewer and tax rates of the various financing options. Determine methodology to determine the "willingness to pay" of City rate payers.

5.5.4 Develop preliminary recommendation. Based on the above information, a preliminary recommendation for financing modernization/construction shall be made.

5.6 *Conduct Public Involvement Meeting.*

At some point in the study, to be determined by the Government and Sponsor, a public involvement meeting shall be held with interested businesses, residences, government agencies, and other interested parties. The objective of this meeting will be to inform the public about the alternatives being considered--including preliminary engineering details, costs, and potential rate impacts--and to seek input and comment from the public.

5.7 *Prepare Reports*

Over the course of the study, the Government and Sponsor shall write 30 percent, 60 percent, 90 percent and final reports describing the study tasks, results and recommendations. The Government shall coordinate these activities.

6. **Schedule**

The major milestones below are established for the study. (A schedule for the study is included as Exhibit A):

1.	Initiate Study	June 19, 1995
2.	First in-progress review meeting Second in-progress review meeting Draft final report	Sep. 19, 1995 Dec. 19, 1995 Feb. 23, 1996
3.	Submit Draft Report to North Pacific Division	Feb. 23, 1996
4.	Division/Headquarters Review period	Feb. 23 to Mar. 26, 1996
5.	Complete Final Report	Apr. 8, 1996

7. Report Format

The report format shall be determined jointly by the Sponsor and Government. The report shall be concise, direct and written in an easy-to-understand style. Study findings shall be summarized in an Executive Summary in the main report. Reproduction of the Final Report shall be the responsibility of the Corps of Engineers and limited to thirty (30) copies.

8. Software

The word processing software to be used by the Government is Microsoft Word 6.0. The Sponsor may choose to use another word processing program if files created on this other software are readable by Microsoft Word 6.0, and if files created by the Government using Microsoft Word 6.0 can be saved in a form readable by the Sponsor's word processing program.

Microsoft EXCEL version 5.0 or compatible software will be used for spreadsheet analysis by the Government and Sponsor.

Other software shall be determined jointly by the Sponsor and the Government.

9. Study Management

This project will be jointly managed by the Sponsor and the Government. The Government is ultimately responsible that the study meets the standards of the Corps of Engineers and proves useful to the local sponsor. The Government and the Sponsor shall make every effort to ensure that the study will accomplish the goals established, proceed as scheduled, and complete the study tasks within budget.

The work is assigned by activity area as indicated in Exhibit B. Each Activity Area has an Activity Leader who will be the main contact person within the activity for persons doing

tasks. The Activity Leader is responsible to see that tasks are completed as described in the work plan and schedule and transmitted on schedule to the Project Facilitator.

The Project Facilitator shall be the primary coordinator of all task work with Activity Leaders. He shall also be responsible for coordinating support services such as graphics, GIS or secretarial services as needed. Each month, or as requested, the project facilitator will report progress of the project to the study management.

Specific management responsibilities for the Government and the Sponsor include:

1. The Government and the Sponsor shall assemble their respective technical personnel and allocate resources to carry out the agreed study task assignments.
2. The Government and the Sponsor shall coordinate work and review progress of the study. Regular meetings (monthly or as required) supplemented by other communication, will be held by the Government and Sponsor study managers to ensure acceptable progress and to address all relevant issues.
3. The Government and Sponsor shall coordinate with appropriate Federal, State and local agencies to inform them of the considered alternatives or to collect required information.
4. Project related correspondence shall be coordinated by the Government Study Manager. This includes responses to the public, other governmental agencies, special interest groups, Congressional, or other inquiries related to the study activities.
5. Each month the Sponsor shall submit to the Government written statements of work accomplished in the past month and In-kind credit claimed for this work. The Government Study Manager shall verify and document In-kind credit.
6. The Government Study Manager shall monitor study expenditures relative to progress and prepare budget documentation.

Principal points of contact for the Sponsor and the Government respectively are:

Mr. Jim Galloway
Public Works Director, City of Troutdale
104 S.E. Kibling
Troutdale, OR 97060
503-665-5175

Mr. Thomas Hackett, Economist
US Army Corps of Engineers
Portland District
P.O. Box 2946
Portland, OR 97208-2946
503-326-6438

10. Study Costs

Total study costs are estimated at \$75,000. The Sponsor will provide \$37,500 as in-kind services, and the Government will allocate \$37,500 to the Portland District, Corps of Engineers, to conduct the study. A detailed cost estimate is presented in Appendix B.

Exhibit A--City of Troutdale STP

ID	Name	Scheduled	Scheduled	Apr '95	May '95	Jun '95	Jul '95	Aug '95	Sep '95	Oct '95	Nov '95	Dec '95	Jan '96	Feb '96	Mar '96	Apr '96
1	Start Study	6/19/95	6/19/95			◆										
2																
3	1. Study Area Description	6/19/95	7/17/95				▨									
4	2. Problem Statement	7/11/95	8/7/95				▨									
5	3.1 Alternative 1 -	7/11/95	8/22/95				▨									
6	a. Summarize CH2M-HILL recommendati	7/11/95	7/25/95				▨									
7	b. Summarize construction cost estimat	7/11/95	7/25/95				▨									
8	c. Identify other factors	7/11/95	8/22/95				▨									
9	3.2 Alternative 2 -	6/19/95	8/21/95				▨									
10	a. Determine type, size of plant	6/19/95	7/31/95				▨									
11	b. Determine possible locations	6/26/95	8/7/95				▨									
12	c. Develop construction cost estimates	8/8/95	8/21/95						▨							
13	d. Identify other factors	7/17/95	8/21/95						▨							
14	3.3 Alternative 3 -	6/19/95	10/18/95				▨									
15	a. Determine willingness to participate	6/19/95	8/18/95				▨									
16	b. Evaluate required capacity of Gresha	8/22/95	9/12/95						▨							
17	c. Develop conceptual design	9/13/95	10/3/95							▨						
18	d. Estimate construction costs	10/4/95	10/18/95								▨					
19	e. Evaluate other factors	7/31/95	10/18/95								▨					

Project: Exhibit A: Troutdale STP
Date: 5/10/95

Critical  Progress  Summary 
Noncritical  Milestone  Rolled Up 

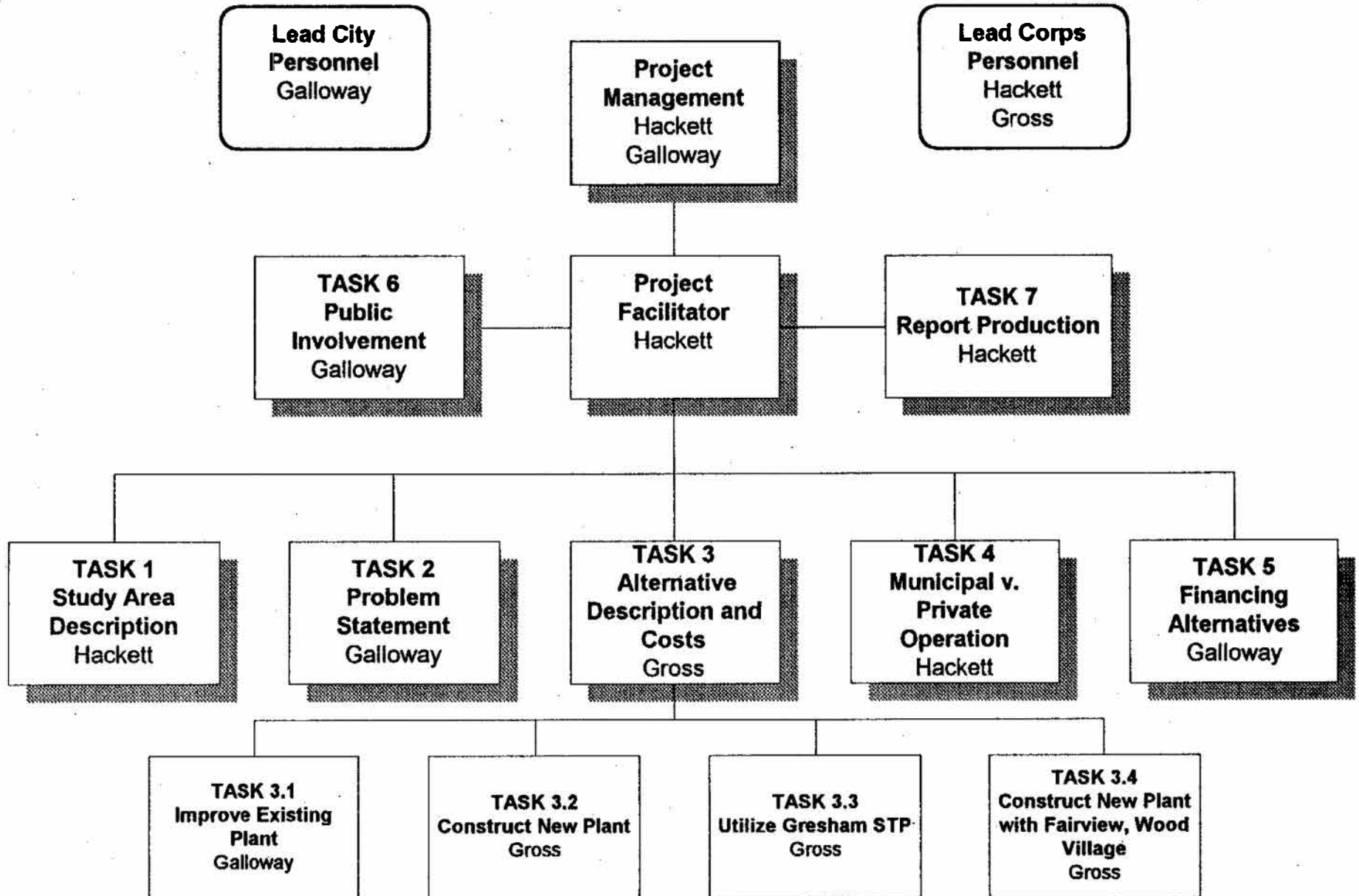
Exhibit A--City of Troutdale STP

ID	Name	Scheduled	Scheduled	Apr '95	May '95	Jun '95	Jul '95	Aug '95	Sep '95	Oct '95	Nov '95	Dec '95	Jan '96	Feb '96	Mar '96	Apr '96
20	3.4 Alternative 4 -	6/19/95	12/15/95													
21	a. Determine willingness to participate	6/19/95	8/18/95													
22	b. Determine required capacity	10/19/95	11/1/95													
23	c. Determine site	11/2/95	11/16/95													
24	d. Develop engineering design	11/17/95	12/1/95													
25	e. Estimate construction costs	12/4/95	12/15/95													
26	f. Identify other factors	8/28/95	12/15/95													
27	4. Analyze Municipal vs. Private Operation	7/18/95	1/9/96													
28	4.1 Gather costs and rates for Troutdale	7/18/95	7/31/95													
29	4.2 Gather costs and rates for Gresham	7/18/95	8/14/95													
30	4.3 Estimate Operating costs for each al	8/2/95	1/9/96													
31	4.4 Identify other factors	8/23/95	1/9/96													
32	5. Propose Applicable Financing Alternatives	8/1/95	1/29/96													
33	5.1 Identify financing sources	8/1/95	10/25/95													
34	5.2 Determine suitability for City of Trou	10/26/95	12/8/95													
35	5.3 Estimate relative rate impacts	10/26/95	1/12/96													
36	5.4 Develop preliminary recommendatio	1/16/96	1/29/96													
37																
38	Public Involvement Meeting	1/19/96	1/19/96													
39																
40	In-Progress Review	9/19/95	9/19/95													
41	In-Progress Review	12/19/95	12/19/95													
42	Draft Final Report	2/23/96	2/23/96													
43	Review Period	2/23/96	3/25/96													
44	Complete Final Report	4/8/96	4/8/96													

Project: Exhibit A: Troutdale STP
Date: 5/10/95

Critical  Progress  Summary 
Noncritical  Milestone  Rolled Up 

Exhibit B
TASKS AND ASSIGNMENTS, CITY OF TROUTDALE
STP STUDY



APPENDIX B
COST ESTIMATE FOR CITY OF TROUTDALE STP STUDY: City of Troutdale
5/3/95

Task	Hours					Total
	Galloway	Worthington	Berg	Moriarty	Contract	
1. Description of Study Area						
1.1 Location	2	1	1			4
1.2 Physical Profile						0
1.3 Land Use	2	1	1			4
1.4 Population and Housing	4	2	1			7
1.5 Employment and Income						0
2. Problem Statement						
2.1 Describe Current System	5	15	2	2		24
2.2 Summarize Flows and Loads	5	15	2	2		24
2.3 Project Flows and Loads	10	20	2	2		34
2.4 Remaining Capacity	5	15	2	2		24
3. Alternatives						
3.1 Improvements to Existing Plant						
a. CH2M-HILL Recommendations	5	10	4	4		23
b. Cost Estimate	5	10	4	4		23
c. Identify Other Factors	5	20	6	6		37
3.2 Construct New Troutdale Plant						
a. Determine type and size of plant						0
b. Determine possible locations						0
c. Develop construction cost estimate						0
d. Evaluate other factors	5	5	2	2		14
3.3 Utilize City of Gresham Plant						
a. Determine cities' willingness to participate	4					4
b. Evaluate Gresham STP excess capacity						0
c. Develop conceptual engineering features						0
d. Estimate construction costs						0
e. Evaluate other factors	5	5	2	2		14
3.4 Construct New Plant with Fairview & Wood Village						
a. Determine cities' willingness to participate	4					4
b. Determine required capacity						0
c. Determine site						0
d. Develop conceptual engineering design						0
e. Estimate construction costs						0
f. Identify other factors	5	5	2	2		14
4. Analyze Municipal vs. Private Operation						
4.1 Determine costs/rates for Troutdale STP	5	5	1	1		12
4.2 Determine costs/rates for other plants						0
4.3 Estimate operating costs for each alternative						0
4.4 Identify other factors	5	5	1	1		12
5. Propose Financing Alternatives						
5.1 Identify financing sources	8	4	2		25	39
5.2 Determine suitability for City	8	4	2		30	44
5.3 Estimate rate impacts	8	4	2		50	64
5.4 Develop preliminary recommendation	16	8	2	4	25	55

Troutdale

Task	Hours					Total
	Galloway	Worthington	Berg	Moriarty	Contract	
6. Public Involvement	40	20	10	8		78
7. Prepare Reports	10	10	5	4		29
Management	20					20
TOTAL HOURS	191	184	56	46	130	607
Hourly Rate	\$ 52	\$ 38	\$ 38	\$ 37	\$ 125	
TOTAL LABOR AND CONTRACT COST	\$ 9,932	\$ 6,992	\$ 2,128	\$ 1,702	\$ 16,250	\$ 37,004
GIS Data						500
TOTAL COST						\$ 37,504

APPENDIX B
COST ESTIMATE FOR CITY OF TROUTDALE STP STUDY: Corps of Engineers
5/5/95

Task	Hours				
	Hackett	Gross	Bertrand	Contract	Total
1. Description of Study Area					
1.1 Location	1		4		5
1.2 Physical Profile	1		4		5
1.3 Land Use	2		5		7
1.4 Population and Housing	2				2
1.5 Employment and Income	2				2
2. Problem Statement					
2.1 Describe Current System		2			2
2.2 Summarize Flows and Loads		2			2
2.3 Project Flows and Loads	2	2			4
2.4 Remaining Capacity		2			2
3. Alternatives					
3.1 Improvements to Existing Plant					
a. CH2M-HILL Recommendations		4			4
b. Cost Estimate		6			6
c. Identify Other Factors	2	2			4
3.2 Construct New Troutdale Plant					
a. Determine type and size of plant		32	12		44
b. Determine possible locations		12	8		20
c. Develop construction cost estimate	2	32			34
d. Evaluate other factors	2	4			6
3.3 Utilize City of Gresham Plant					
a. Determine cities' willingness to participate	2	8			10
b. Evaluate Gresham STP excess capacity		8			8
c. Develop conceptual engineering features		16	8		24
d. Estimate construction costs	2	16			18
e. Evaluate other factors	2	4			6
3.4 Construct New Plant with Fairview & Wood Village					
a. Determine cities' willingness to participate	2	8			10
b. Determine required capacity		8			8
c. Determine site		8	8		16
d. Develop conceptual engineering design		24	12		36
e. Estimate construction costs	2	24			26
f. Identify other factors	2	4			6
4. Analyze Municipal vs. Private Operation					
4.1 Determine costs/rates for Troutdale STP	4				4
4.2 Determine costs/rates for other plants	8				8
4.3 Estimate operating costs for each alternative	16	8			24
4.4 Identify other factors	4				4
5. Propose Financing Alternatives					
5.1 Identify financing sources	2				2
5.2 Determine suitability for City	2				2
5.3 Estimate rate impacts	2				2
5.4 Develop preliminary recommendation	2				2

Corps

Task	Hours				Total
	Hackett	Gross	Bertrand	Contract	
6. Public Involvement	8	4			12
7. Prepare Reports	40	40			80
Management	40				40
TOTAL HOURS	156	280	61	0	497
Hourly Rate	\$ 78	\$ 68	\$ 90		
TOTAL LABOR AND CONTRACT COSTS	\$ 12,168	\$ 19,040	\$ 5,490	\$ -	\$ 36,698
Printing, Materials and Supplies					\$ 800
TOTAL COSTS					\$ 37,498