



December 20, 1978

City of Grand Junction
and Mesa County
City Hall
Grand Junction, Colorado 81501

Attention: Mr. Duane Jensen, P.E.
Utility Engineer

RE: Engineering Consultation
Interim Sewage Treatment Facilities
Prior to Completion of the Persigo Wash WWTP

Gentlemen:

In accordance with the request of Mr. Duane Jensen, we herewith offer you our services as you may direct in regard to a study and recommendation(s) regarding interim sewage treatment facilities prior to completion of the planned Persigo Wash Wastewater Treatment Plant. The included scope of work has been discussed in detail with Mr. Jensen, Mr. James Patterson and our staff on October 18 and again on December 18, 1978.

Part I - General

In order to meet the growth pressures of current development (both housing and commercial) within the sewer service area, alternatives capable of providing an interim treatment capability until the Persigo Wash WWTP is on the line must be studied. A study is anticipated that will address the reasonable alternatives to provide this interim treatment capability, implementation schedules, cost estimates, potential continued use in the Persigo Wash WWTP of any interim facilities constructed, effluent limitations and potential funding by the EPA. It is intended that the proposed interim treatment capability will provide service to new sewage flows or existing sewage flows that are not adequately treated, however, it is not the intention of this study to eliminate any existing package plants or individual home treatment systems that are currently performing their intended use. A more detailed scope of work is as follows:

Architecture
Engineering
Planning
Systems
Economics

Alexandria, Va.
Atlanta
Charlotte
Chicago
Dallas
Denver
Helena
Minneapolis
New Orleans
Norfolk, Va.
Omaha
Pensacola
Phoenix
Santa Barbara
Seattle
Washington, D.C.

Part II - Scope of Work

1. Determine the volume, location and timing of the anticipated sewage loads requiring treatment. We anticipate this work to be done in conjunction with City of Grand Junction staff and the effort will be limited to that necessary to determine the treatment requirements.
2. Prepare an area map showing the impact points of these sewage loads.
3. Review the various schedules and their interrelationships including proposed developments, the various sewers (River Road, Independent Avenue, Paradise Hills - Phase II, Goat Wash and Tiaro Rado) and Persigo Wash WWTP to determine the time period for interim treatment.
4. Identify and evaluate the various alternative treatment schemes to include but not necessarily be limited to the following:
 - a. Package treatment plant (include new as well as any possible used plants that might be available).
 - b. Lagoon (to be located at Persigo Wash Plant site).
 - c. Other.

Discuss the advantages and disadvantages of the above alternatives as they relate to the required interim treatment capability.

5. Discuss the potential for the continual use of any of the above alternatives in the Persigo Wash facility when it goes on the line.
6. Review with the Colorado Department of Health what their position would be in regard to any temporary treatment plants (effluent limitations to be met, new discharge permits required, etc.)
7. Prepare preliminary total project cost estimates for each of the alternatives considered reasonable.

8. Discuss the potential inflation cost savings on the various sewers that might be constructed and used with the treatment alternatives.
9. Review with the Colorado Department of Health and the Environmental Protection Agency the potential for grant funding of this interim treatment capability zeroing in on those plans which can be utilized as a functional part of the Persigo Wash plant. Review and discuss schedules necessary to be met in order to implement any interim treatment alternative.
10. Maintain continued contact with the City staff as the study proceeds not only to keep them appraised but to eliminate or keep to a minimum effort on alternatives that have minimal merit.
11. Write a letter report in sufficient detail that will allow City staff to recommend to City Council a course of action to follow. This report would include schedules, costs, facility location maps, treatment schematic drawings, evaluations of the various plans and an engineer's recommendation on a course of action to follow.

Part III - Schedule and Payment

We anticipate this study will take approximately six weeks to complete once we receive a notice to proceed.

For all services performed under Part I and II, we are to be paid a fee equal to the payroll cost* of our personnel working on the project times a factor of 2.1 plus actual expenses, travel and lodging at cost, and other miscellaneous direct expenses as may be necessary.

For the services of any consultants retained by us, to assist in the work, such as Culp/Wesner/Culp, consultants on process and operation, we will bill you the amount of their actual invoices to us.

*Payroll costs are salary costs of employees working on the project plus 31.67% of said salary costs to cover taxes, payments or premiums related to Workmen's Compensation Insurance, social security, State and Federal unemployment insurance, medical insurance, sick leave, holidays and vacation pay.

We will invoice the City on a monthly basis for services rendered during the preceding month.


Based on the scope of work presented, we estimate that the total services covered by this agreement will not exceed \$12,000.00 without authorization from you.

We appreciate the opportunity of presenting this to you. If this is acceptable, please return one executed copy for our files.

Yours very truly,

HENNINGSON, DURHAM & RICHARDSON, INC.
OF COLORADO

By



W. L. Bredar, P. E.
Executive Vice-President

ACCEPTED

CITY OF GRAND JUNCTION AND MESA COUNTY

By _____

JEA:ttn

