

July 18, 2018

Mr. Alan Jones
Washoe County Community Services Department
1001 East Ninth Street
Reno, Nevada 89520

Subject: Pleasant Valley Interceptor Reach 3 – Detailed Design Services

Dear Alan:

Carollo Engineers, Inc. (Carollo) is pleased to submit this proposal to the Washoe County Community Services Department (County) for detailed design and project permitting assistance for Reach 3 of the Pleasant Valley Interceptor (PVI-R3). PVI-R3 is a sanitary sewer pipeline project with associated components including the proposed Geiger Lift Station.

Project planning was initiated in 2004 with a follow-up effort in 2017. The preliminary design was developed in the first half of 2018 and is summarized in a draft report entitled *Washoe County Pleasant Valley Interceptor Reach 3 Preliminary Design Report* dated May 2018. The detailed design of the PVI-R3 project will be based on the preliminary design effort with modifications as requested by the County. Reach 3 of the Pleasant Valley Interceptor begins in the northern portion of Pleasant Valley near the County's existing Dorothy Towne Pump Station and terminates in the southern portion of the Truckee Meadows where it connects to the existing Reach 2 segment of the Pleasant Valley Interceptor.

The PVI-R3 project is required to replace existing sanitary sewer conveyance infrastructure that has passed its useful life, and to serve new development in the tributary sewershed. A design-bid-build project delivery method will be used for project design and construction.

The scope of services to be provided by Carollo is divided into five major tasks as described in detail in Exhibit A. The five tasks include the following.

1. Project Management
2. Detailed Design, Construction Contract Documentation and Project Permitting
3. Detailed Design of Reclaimed Water System Improvements
4. Brookside Mobile Home Park Wastewater Collection System Improvements
5. Bid Period Services

The components of the detailed design work includes the following:

1. Approximately 5,900 linear feet of 12-inch gravity sewer.
2. The Geiger Lift Station, a submersible type sanitary sewer pump station with a firm pumping capacity of 0.7 million gallons per day (mgd) and associated dual force main, consisting of 6-inch and 8-inch diameter pipes each approximately 2,175 linear feet. Components of the Geiger Lift Station includes the following:
 - a. Inlet piping and manhole.
 - b. Wet well with submersible pumps.
 - c. Pump discharge piping and discharge header vault.
 - d. Emergency storage facility.
 - e. Flow meter vault.

- f. Dual force main isolation valve vault.
 - g. Control building housing electrical and control/instrumentation equipment.
 - h. Auxiliary power supply engine generator.
- 3. Approximately 6,900 linear feet of 18-inch gravity sewer to the point of connection with the existing Reach 2.
 - 4. Demolition and abandonment of the existing Dorothy Towne Lift Station.
 - 5. Improvements to the existing wastewater collection system of the Brookside Mobile Home Park
 - 6. Design and construction of improvements to the County's reclaimed water distribution system including installation of a pipeline to provide reclaimed water service to the Geiger Lift Station as a source of water supply for lift station wash-down needs.

Carollo will provide assistance to the County for securing a Right of Way Occupancy Permit from the Nevada Department of Transportation (NDOT) and a Special Use Permit from the City of Reno as described in Exhibit A.

Carollo proposes a time and material, not to exceed basis for the basis of compensation. The proposed fee for the professional services to be provided by Carollo in the detailed design phase is presented in Exhibit B.

The project schedule calls for completion of the design by the end of 2018 with construction commencing in March 2019. Exhibit C.1 includes the overall design and construction schedule along with separate schedules specific to the detailed design in Exhibit C.2 and project permitting in Exhibit C.3.

Carollo will prepare construction contract documents including construction plans, bid documents, and technical specifications for the County's use in soliciting contractor bids. A preliminary listing of expected construction plan sheets is provided in Exhibit D and a preliminary listing of expected specifications is provided in Exhibit E.

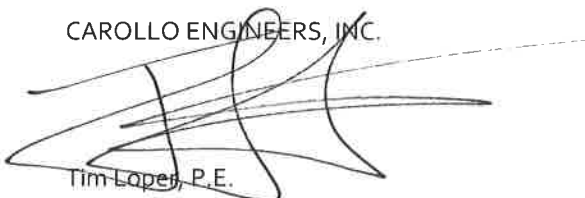
Carollo will prepare two sets of construction plans with one set covering the portion of PVI-R3 that generally includes the northernmost 1,850 linear feet of gravity conveyance pipeline which will be developer constructed with County oversight.

The design and construction of the PVI-R3 project is subject to special considerations including, in portions of the alignment, geothermal activity resulting in elevated groundwater and soil temperatures, areas of archeological significance, namely the wintering grounds of ancient Native American tribes, and areas of environmental concern including the Steamboat Buckwheat, a federally listed endangered species.

Carollo appreciates the opportunity to provide professional engineering services to the County. Please feel free to contact me at your convenience if you have any questions or need additional information.

Sincerely,

CAROLLO ENGINEERS, INC.



Tim Loper, P.E.
Vice President

ETM:etm

Enclosures: Exhibit A - Scope of Services

Exhibit B.1 - Labor Hour Breakdown and Fee Estimate for Detailed Design, Permitting, and Bid Period Services

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Exhibit C.1 - Overall Design, Bidding, and Construction Schedule

Exhibit C.2 - Detailed Design Schedule

Exhibit C.3 - Project Permitting Schedule

Exhibit D - Preliminary Construction Plan Sheet Count

Exhibit E - Preliminary Technical Specification Listing